

BEFORE THE

INDIANA UTILITY REGULATORY COMMISSION

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PETITION OF THE BOARD OF DIRECTORS	APR 9 2 2001
FOR UTILITIES OF THE DEPARTMENT OF	INDIANA UTILITY
PUBLIC UTILITIES OF THE CITY OF	REGULATORY COMMISSION
INDIANAPOLIS, AS SUCCESSOR TRUSTEE	REGULATURI CO.
OF A PUBLIC CHARITABLE TRUST, D/B/A	
CITIZENS THERMAL ENERGY FOR (1)	
AUTHORITY TO INCREASE ITS RATES AND	
CHARGES FOR STEAM UTILITY SERVICE, (2)) CAUSE NO. 43201
APPROVAL OF A NEW SCHEDULE OF	
RATES AND CHARGES APPLICABLE	
THERETO, (3) APPROVAL OF CHANGES TO ITS	
GENERAL TERMS AND CONDITIONS FOR	
STEAM SERVICE, (4) APPROVAL OF NEW	
DEPRECIATION ACCRUAL RATES, AND (5)	
APPROVAL FOR THE QUARTERLY FILING OF	
FUEL COST ADJUSTMENT APPLICATIONS.	

DIRECT TESTIMONY AND EXHIBITS OF

LATONA S. PRENTICE DONALD J. CLAYTON and CRAIG A. JONES

On Behalf of Petitioner, Citizens Thermal Energy

Volume II

Michael E. Allen (Atty. No. 20768-49) Citizens Thermal Energy 2020 N. Meridian Street Indianapolis, IN 46202 Telephone: (317) 927-4318 Facsimile: (317) 927-4318 Michael B. Cracraft (Atty. No. 3416-49) Steven W. Krohne (Atty. No. 20969-49) Hackman Hulett & Cracraft, LLP 111 Monument Circle, Suite 3500 Indianapolis, IN 46204-2030 Telephone: (317) 636-5401 Facsimile: (317) 686-3288

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DIRECT TESTIMONY AND EXHIBITS of LATONA S. PRENTICE

On Behalf of Petitioner

Citizens Thermal Energy

Petitioner's Exhibit LSP

Direct Testimony of LaTona S. Prentice Petitioner's Exhibit LSP Citizens Thermal Energy IURC Cause No. 43201 Page No. 1 of 21

1	INIE	RODUCTION
2	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
3	A.	LaTona S. Prentice. My business address is 2020 North Meridian Street,
4		Indianapolis, Indiana 46202.
5	Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
6	A.	I am employed by the Board of Directors for Utilities of the Department of Public
7		Utilities of the City of Indianapolis, d/b/a Citizens & Coke Utility and also Citizens
8		Thermal Energy, ("Citizens" or "Utility"), as its Executive Director of Regulatory
9		Affairs.
10	Q.	HAVE YOU HELD ANY OTHER POSITIONS WITH CITIZENS GAS?
11	A.	I began my employment with Citizens in 1984 as an Accountant. During my
12		employment with Citizens, I also have held the positions of Budget & Rates
13		Administrator, Budget & Operations Analyst, Rates and Operations Analyst, Rates
14		Manager, Director of Budget & Rates, and Director of Regulatory Affairs.
15	Q.	PLEASE DESCRIBE THE DUTIES AND RESPONSIBILITIES OF YOUR
16		PRESENT POSITION.
17	A.	I am responsible for the development, implementation, and administration of Citizens
18		rates and charges and terms and conditions for gas and steam service. I prepare, or
19		supervise the preparation of, accounting and financial adjustments, cost of service
20		studies, and rate design testimony. Since 1986, I have been responsible for the

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1		preparation of cost of service studies, rate design changes, annual FAC changes,
2		quarterly GCA changes, and miscellaneous rate matters.
3	Q.	PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.
4	A.	I graduated from Ball State University in 1984 with a Bachelor of Science Degree in
5		Accounting.
6	Q.	HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?
7	A.	Yes.
8	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
9	A.	My testimony describes the overall revenue requirements for Citizens' provision of
10		steam service (including the underlying adjustments to the financial results for the
11		test year ended September 30, 2006), including a discussion of a proposed phased-in
12		rate increase.
13	<u>FIN</u>	ANCIAL AND ACCOUNTING OVERVIEW
14	Q.	PLEASE DESCRIBE EXHIBIT LSP-1, PAGE 1.
15	A.	Exhibit LSP-1, page 1, is the Statement of Operating Income for the twelve months
16		ended September 30, 2006 (the test year for this proceeding) and the pro forma
17		revenue requirement for Citizens' steam operations. Column C shows Citizens'
18		actual results of operations for the test year. Column D reallocates corporate
19		support services ("CSS") dollars from other general & administrative costs (line
20		19) to related expense lines for cost of service study purposes. The total of

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Column D nets to zero, as it is simply a reallocation of expenses among the income statement lines. Column E is the total of Columns C and D, and line 27 represents the total operating expenses of the steam division, including its share of CSS expenses. Column F shows the pro forma adjustments made to reflect the going-level of steam operations at present rates in order to reflect fixed, known, and measurable changes which will occur within twelve months following the end of the test year. Column G shows the pro forma revenue requirements reflecting the adjustments shown in Column F. Column H shows the total of the pro forma adjustments required to produce Citizens' proposed revenue requirement and operating income shown in Column I. Accordingly, Column I shows the pro forma statement of operating income after adjusting for the proposed rate increase.

The final two columns – Columns J and K – indicate the pro forma adjustments to reflect the December 1, 2008 effective date and impact of the Steam Purchase Agreement ("Covanta Agreement") entered into between Citizens and Covanta Indianapolis, Inc. ("Covanta") and approved by the Commission's December 28, 2006 Order in Cause No. 43025, which will be further discussed later in my testimony. These two columns will form the basis of the second phase of the proposed revenue requirement increase and resulting operating income.

Q. WHAT WAS THE ACTUAL STEAM DIVISION OPERATING INCOME FOR THE TEST YEAR?

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1	A.	The actual operating income for the twelve months ended September 30, 2006, as
2		shown on Column C, line 28, of Exhibit LSP-1, page 2 was \$2,135,340.
3	Q.	IN YOUR OPINION, DOES COLUMN G OF EXHIBIT LSP-1, PAGES 1
4		AND 2, ACCURATELY REFLECT CITIZENS' STEAM OPERATIONS AND
5		REVENUE REQUIREMENT DURING THE TEST YEAR, ADJUSTED FOR
6		FIXED, KNOWN, AND MEASURABLE CHANGES WHICH WILL OCCUR
7		WITHIN TWELVE MONTHS FOLLOWING THE END OF THE TEST
8		YEAR?
9	A.	Yes.
10	Q.	ARE COLUMNS F AND G OF EXHIBIT LSP-1, PAGES 1 AND 2, USED
11		ELSEWHERE IN THE UTILITY'S CASE-IN-CHIEF?
12	A.	Yes. Columns F and G of Exhibit LSP-1, pages 1 and 2, summarize the phase one
13		overall revenue requirement of the Utility and the adjustments used to arrive at the
14		pro forma revenue requirement. Petitioner's witness Kerry Heid used information
15		from Exhibit LSP-1, pages 1 and 2, to prepare the Utility's cost of service study
16		and rate design.
17	Q.	PLEASE SUMMARIZE THE PRO FORMA REVENUE REQUIREMENT.
18	A.	I have tried to keep the adjustments simple and direct, and to avoid smaller, less
19		important adjustments to Citizens' steam revenue requirements to help reduce the
20		complexity of the case. The pro-forma revenue requirement totals \$60,588,256 and

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indicates that Citizens requires an increase in base rate revenues of \$6,753,988 in order to provide it with an opportunity to earn a net operating income of \$6,521,688. The net operating income from the proposed rates must be sufficient to meet the Utility's annual debt service obligations, any working capital needs, and to fund extensions and replacements in excess of depreciation. Exhibit LSP-1, page 3, shows in a chart the Utility's pro forma revenue requirement by cost category.

The phase two revenue requirement of \$63,650,926 reflects a \$3,062,670 base rate increase beginning December 1, 2008 to recover the increased costs from the recently approved Covanta Agreement when it becomes effective. The phase two increase will allow Citizens to continue to produce a net operating income of \$6,521,688 sufficient to recover Citizens' debt service, any working capital, and extensions & replacements in excess of depreciation.

Q. PLEASE DESCRIBE EXHIBIT LSP-1, PAGES 4 AND 5.

I prepared Exhibit LSP-1, pages 4 and 5, to summarize the overall revenue requirement of the Utility and the detailed adjustments used to arrive at the proforma revenue requirement. Petitioner's witness Kerry Heid also used information from this exhibit to prepare the Utility's cost of service study and rate design. Each adjustment is accompanied by a reference to the exhibit containing the detailed adjustment to test year revenue or expense.

A.

DETAILED	DESCRIPTION	OF PRO	FORMA	ADJUSTMEN	TS
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- Q. PLEASE DESCRIBE EXHIBIT LSP-1, PAGES 6 THROUGH 8.
- 3 A. Exhibit LSP-1, pages 6 through 8, set forth the pro forma adjustments to Citizens'
- test year gross margin and represent a net increase in test year margin of \$866,872
- 5 (see Exhibit LSP-1, page 1, line 6, column F).
 - Operating Revenue and Fuel Cost:

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- O. PLEASE DESCRIBE EXHIBIT LSP-1, PAGE 6.
- 8 A. Exhibit LSP-1, page 6, shows the pro forma margin to be derived from steam sales
- based upon normal weather. Normal weather was determined by reference to the 30-
- year normal heating degree days and cooling degree days as published by NOAA.
- The test year heating degree days were 9.5% warmer than normal, while the test year
- 12 cooling degree days were 2% warmer than normal; therefore, the net margin
- increases. The impact of this adjustment, revenue less cost of fuel, is an increase in
- test year margin of \$666,259, as shown on line 7 of page 6 of Exhibit LSP-1.
 - Q. PLEASE DESCRIBE EXHIBIT LSP-1, PAGE 7.
- A. Exhibit LSP-1, page 7, represents an adjustment needed to reflect the change from
- the test year number of customers to the pro forma number of customers and their
- associated usage. The pro forma number of customers identifies customers whose
- service was disconnected or added during the test year and adjusts the number of
- customers to remove from or add to the test year monthly customer numbers by

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class during the months that had not reflected those removals or additions. In addition, we added customers to the extent we know they will be connected during the 12 months following the end of the test year. Lastly, the methodology for reporting customer numbers changed during the 12 months following the end of the test year. During the test year, the number of customers was defined as the number of active services on the system. Some services are served by more than one meter. Subsequent to the test year, and in the pro forma calculations, the number of customers is defined by the number of active meter points. The change in customer number reporting methodology was the result of Citizens migration to a new billing system effective October 1, 2006. The new billing system defines customers as an active meter point. The net change in customers/meters by class is found in Exhibit LSP-1, page 7, line 9. It appears the total number of customers increased dramatically from the test year to pro forma; however, the Rate 1 increase primarily is caused by the change in customer number reporting methodology. Petitioner's witness Kerry Heid will utilize the new pro forma customer/meter numbers in his determination of the Utility's rate design. The test year margin is increased by \$217,435 to reflect the increased number of customers.

Q. WHAT IS THE PURPOSE OF EXHIBIT LSP-1, PAGE 8?

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A. The purpose of Exhibit LSP-1, page 8, is to remove the change in unbilled revenue less fuel cost recorded in the test year of (\$18,593), as the pro forma revenue and cost

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of fuel reflect a billed basis rather than an unbilled basis. In addition, Exhibit LSP-1, page 8, identifies test year miscellaneous billing adjustments for removal from the test year margin, an increase of \$24,903, and the impact of the changes in the average customer charge and fuel price from test year to pro forma, a margin decrease of \$15,225. Consistent with the following adjustment, the test year fuel cost associated with electric revenues has been removed as well, amounting to a reduction of \$5,198.

Q. WHAT IS THE PURPOSE OF EXHIBIT LSP-1, PAGE 9?

A. The purpose of Exhibit LSP-1, page 9, is to remove the electric revenues of \$6,538 from the test year pro forma revenue. As Petitioner's witness Jamie Dillard explains in his testimony, Citizens does not anticipate generating electric revenues on a pro forma basis.

Q. PLEASE DESCRIBE PETITIONER'S EXHIBIT LSP-1, PAGE 10.

A. Exhibit LSP-1, page 10, reflects various pro forma adjustments to non-fuel related cost of goods sold. Electric utility expense shows an increase of \$105,766 to reflect a full year's impact of the higher demand ratchet applicable to Citizens' electricity usage.

Pursuant to the City Ordinance that establishes the sewer user charge, the test year sewer expense is adjusted to reflect an increase of \$38,671 to reflect a 29% phase I increase effective January 1, 2006, followed by a 22% phase II increase effective January 1, 2007, as shown on line 3 of page 10 of Exhibit LSP-1.

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Phase III of the sewer user charge rate increase will become effective January 1, 2008; however, that increase has not been factored into the pro forma adjustment, because it will occur more than twelve months after the end of the test year in this rate case.

As explained in the testimony of Petitioner's witness Bill Tracy, Citizens has instituted a polymer program which will increase test year chemical costs by \$114,201, as shown on line 4 of page 10 of Exhibit LSP-1.

Operations & Maintenance:

A.

Q. WHAT IS THE PURPOSE OF PETITIONER'S EXHIBIT LSP-1, PAGE 11?

Exhibit LSP-1, page 11, is a computation of pro forma operations and maintenance expenses. Line 2 of the Exhibit reflects a \$39,000 adjustment to environmental expense for a 25% increase in the Indiana Department of Environmental Management's air permit fees and an increase in the fee paid to the United States Geological Survey (through the Ohio River Sanitation Commission) for maintenance of gauging systems on the White River used to determine compliance with the wastewater discharge permit. In his testimony, Mr. Dillard discusses a pump rebuilding project to institute a seven-year rebuilding rotation. An adjustment of \$65,339 to operations and maintenance expense is shown on line 3 to reflect the pump parts associated with this project. Another \$29,166 was included to provide for the plant electrical system upgrade expense described by Mr. Dillard

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in his testimony. In addition, contracted services expenses are adjusted by \$217,632 for the increase in contracted labor associated with the electrical system upgrade program.

Mr. Dillard also describes an adjustment for real estate rental license expenses of \$61,905 to reflect the expenses associated with renting facilities from the gas division to house the steam division's operating crews and equipment. The license was effective October 1, 2006. Prior to being located at the gas division's operations facility, the steam distribution operations worked from the steam facility.

As a result of pro forma increases in the amount of coal used as fuel compared to the test year, and pursuant to notification from our contractor that Citizens' sludge and ash removal price will increase 5% in 2007, sludge and ash removal costs were increased \$239,277.

General & Administrative:

- Q. MR. BREHM'S TESTIMONY INDICATES THAT THE AMOUNTS ON PETITIONER'S EXHIBIT JRB-8 SERVE AS INPUTS TO YOUR PROFORMA ADJUSTMENTS. PLEASE EXPLAIN.
- A. Exhibit LSP-1, page 1, column C, line 19, is the amount of test year CSS cost allocated to the steam division. Where applicable, a weighted steam division allocation percentage was applied to CSS costs in the calculation of the pro forma

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adjustments described throughout the remainder of my testimony. As reflected in Petitioner's Exhibit JRB-8, column A, line 6, approximately 6.4% of the CSS labor-related costs were allocated to the steam division. Certain pro forma costs were directly assigned to the steam division, where a distinct allocation was more appropriate. On Exhibit LSP-1, page 1, column C, I used actual test year allocations to redistribute test year CSS costs to related expense lines of the revenue requirements in the test year for cost of service study purposes.

Due to the disposition of the Manufacturing Division described in the respective testimony of Mr. Lykins and Mr. Brehm, any pro forma adjustments to CSS allocations were allocated to the steam division according to Mr. Brehm's CSS allocation factor after adjusting for the disposition of the manufacturing division. The pro forma allocation factor of 7.5% is provided in Petitioner's Exhibit JRB-8, column A, line 3, and was utilized to allocate pro forma CSS costs to the steam division.

Certain CSS costs have been re-allocated in the revenue requirements from corporate support expense to related expense lines for cost of service study purposes. For example, employee benefits expenses are incurred in both the steam division and CSS. In order to properly allocate these costs among the customer classes in the cost of service study, CSS employee benefits costs allocated to steam operations were added to the steam division employee benefits costs to more

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efficiently allocate those costs in the cost of service study. A total of \$1,032,208 was reallocated from CSS costs among the income statement line items, as reflected in Exhibit LSP-1, pages 1 and 2, column D.

Q. HAVE YOU PROVIDED A PRO FORMA ADJUSTMENT FOR INCREASED

PAYROLL EXPENSES?

A.

- Yes, I have. Exhibit LSP-1, page 12, depicts the increase in pro forma payroll expenses. The increase in payroll was determined using current levels of employees and annualized pay rates that will go into effect prior to September 30, 2007. The overall pay rate adjustment amounts to a 12.6% increase, which annualizes the May 2006 pay increase, reflects a May 2007 pay raise, and 7 recently-added positions. The annualization of regular payroll results in an expense of \$6,177,384. To this expense, I have added overtime and supplemental pay. Further, in order to arrive at the amount of payroll to be expensed (as opposed to capitalized), I have deducted the amount of pro forma payroll associated with capital projects. This pro forma amount of \$115,232 is a capital cost which has been included as part of the extensions and replacements revenue requirement. Overall, payroll expense has been increased by \$842,000.
- Q. PLEASE DESCRIBE THE PRO FORMA ADJUSTMENT SHOWN ON PETITIONER'S EXHIBIT LSP-1, PAGE 13.

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A. Exhibit LSP-1, page 13 shows the increase in employee benefits expense. Certain adjustments are related to the increase in payroll expense. The employee benefits expenses that will increase with base payroll are \$72,786 higher than the test year. Non-payroll related employee benefits have been adjusted to reflect a net increase of \$290,830, as shown on line 11 of page 13. In total, employee benefits were increased by \$363,616.

A.

Q. WHAT EMPLOYEE BENEFIT EXPENSES ARE NOT DIRECTLY RELATED TO THE LEVEL OF PAYROLL?

Pension, employee health and life insurance and post retirement benefits fit that description. The pension adjustment reflects the pro forma cash pension contribution as proposed by the Utility's actuary, McCready and Keene, Inc. The test year pension expense was \$618,235, and reflects the accrual accounting for two separate pension plans, bargaining and non-bargaining. Effective January 1, 2007, the two pension plans were combined. The annual review and evaluation of the Utility's pension plan for appropriate funding conducted by McCready and Keene, Inc. indicated a cash deficiency in its combined pension plan, and as a result, McCready and Keene, Inc. has recommended a total cash pension funding of the pension plan during the twelve months following the test year in the amount of \$488,365, which decreases the test year expense by \$129,870. The pro forma adjustment to employee health and life insurance expense is based upon the 2007

budget. Between fiscal years 2003 and 2005, actual CSS health care insurance increased from \$2,165,122 to \$2,637,961, which is an approximate 22% increase over two years, or an average of 11% per year. Additional information provided in a September 2005 report issued by Mercer Human Resource Consulting, LLC indicated employers should expect an average increase of nearly 10%. After increasing the test year health and life insurance of \$837,113 by 10%, plus adding the \$388,352 the steam division was already over-budget at January 31, 2007, the resulting projected cost was even larger than the 2007 budget. Therefore, we elected to conservatively rely upon the 2007 budgeted health and life insurance costs plus the \$388,352 variance previously described for our pro forma cost. The pro forma adjustment increased test year employee insurance expense \$416,485. In each of the last five years, employee health care expenses have steadily increased. In addition, pro forma post retirement benefits expense is \$3,281 greater than the test year, as prepared by the Utility's actuary McCready and Keene, Inc., and other benefits are \$934 greater than the test year.

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- Q. WHY DOES CITIZENS REFLECT THE CASH FUNDING OF THE PENSION PLAN IN THE REVENUE REQUIREMENTS, RATHER THAN AS AN ACCRUAL EXPENSE?
- A. The statute governing municipal utility ratemaking (IC 8-1.5-3-8) uses a cash revenue requirements methodology for ratemaking purposes. In many instances,

Direct Testimony of LaTona S. Prentice **Petitioner's Exhibit LSP** Citizens Thermal Energy **IURC Cause No. 43201** Page No. 15 of 21

the accrual method and the cash method of determining a revenue requirement item result in a similar number. In some cases, however, the difference between the two accounting methodologies is significant. The pension revenue requirement is an example of one of those differences WHAT ADJUSTMENTS WERE MADE TO OTHER GENERAL AND ADMINISTRATIVE EXPENSES AS SHOWN ON EXHIBIT LSP-1, PAGE 14? Two adjustments were made to test year regulatory costs. The first adjustment of \$31,200 is to reflect higher ongoing regulatory expenses as a result of a change in the computation of OUCC and Commission fees for municipal utilities, and to reflect an increase in the number of FAC filings each year from one to four.

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Petitioner's witness Craig Jones will address the frequency of FAC filings in his testimony. In addition, \$147,523 has been added to reflect a three-year amortization of costs associated with this case.

Pro forma insurance costs are \$65,264 lower than the test year in recognition of reduced insurance premiums. As described in the testimony of Mr. Brehm, the disposition of the manufacturing division increases test year general & administrative expenses by \$47,820 to reflect the steam system's allocation of the net change in non-payroll related CSS costs, as shown on line 6 of page 14 of Exhibit LSP-1. The last pro forma general & administrative expense adjustment is

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1		an increase of \$1,800 to correct a test year booking error, which is set forth on line
2		5 of page 14.
3	Depr	eciation:
4	Q.	PLEASE DESCRIBE EXHIBIT LSP-1, PAGE 15.
5	A.	The pro forma level of depreciation expense shown on Exhibit LSP-1, page 15, line
6		4 is based on the utility plant in service at September 30, 2006, adjusted for items
7		to be closed to plant during the following twelve months and the applicable 5.46 $\%$
8		composite depreciation rate currently in effect and in effect since January 1, 2006.
9		The pro forma increase in depreciation expense is \$701,380, a portion of which is
10		to annualize the depreciation rate that became effective January 1, 2006.
11		Petitioner's witness Donald J. Clayton performed a depreciation study prior
12		to the end of the test year in this rate case, which is discussed in his testimony and
13		identified as Petitioner's Exhibit DJC-1.
14	Taxe	<u>es:</u>
15	Q.	HAVE YOU MADE A COMPUTATION REGARDING PRO FORMA
16		PAYROLL TAXES?
17	A.	Yes. This calculation is shown on Petitioner's Exhibit LSP-1, page 16. I applied
18		the payroll tax rates to the Utility's pro forma taxable payroll subject to the tax to
19		arrive at a pro forma increase to payroll tax expense of \$101,328, as shown on line
20		11.

1	Q.	PLEASE DESCRIBE THE ADJUSTMENT MADE TO PROPERTY TAX
2		EXPENSE.
3	Α.	In Exhibit LSP-1, page 17, I reduced the test year property tax expense by \$27,231
4		to reflect the actual amount of property taxes paid in May and November 2006.
5		The test year expense per books reflected the accrual of property tax for the year.
6	Q.	PLEASE DESCRIBE PETITIONER'S EXHIBIT LSP-1, PAGE 18.
7	A.	Exhibit LSP-1, page 18, describes the pro forma increase in Indiana Utility
8		Receipts Tax ("IURT") expense. The pro forma operating revenue at current rates
9		is multiplied by the 1.4% utility receipts tax rate. Line 4 reflects this increase in
10		revenue, which translates into a \$84,827 increase in IURT expense at present rates.
11		In addition, Exhibit LSP-1, page 18, lines 5 through 7, reflect the computation of
12		the increase in IURT caused by the pro forma increase in operating revenue, as
13		described below.
14	<u>Othe</u>	er Requirements:
15	Q.	EXHIBIT LSP-1, PAGE 5, REFLECTS AN ANNUAL REVENUE
16		REQUIREMENT FOR DEBT SERVICE. DO YOU SPONSOR AN EXHIBIT
17		FOR DEBT SERVICE?
18	A.	No. The total annual revenue requirement for debt service of \$5,118,068 is se
19		forth on Petitioner's Exhibits MDS-1, and MDS-2, which are attached to the
20		testimony of Michael D. Strohl.

1	Q.	EXHIBIT LSP-1, PAGE 5, ALSO REFLECTS A REVENUE REQUIREMENT
2		FOR EXTENSIONS & REPLACEMENTS. WHERE IN THE UTILITY'S
3		CASE-IN-CHIEF IS THAT REVENUE REQUIREMENT DESCRIBED?
4	A.	The proposed annual revenue requirement of \$3,846,597 for extensions &
5		replacements and a description of the basis for the proposed extensions &
6		replacements revenue requirement are set forth in the testimony and exhibits of
7		Citizens' witness Jamie Dillard.
8	PRO	POSED INCREASE IN OPERATING REVENUE
9	Q.	WHAT IS THE AMOUNT OF THE PROPOSED INCREASE TO CITIZENS'
10		OPERATING REVENUE FOR STEAM SERVICE?
11	A.	Exhibit LSP-1, page 2, column G, line 34, shows the calculation of the proposed
12		revenue increase, prior to IURT, which is necessary for Citizens to recover its pro-
13		forma revenue requirement. The increased revenue requirement is calculated by
14		determining the pro forma revenue requirement at present rates (column G, line
15		33), less the pro forma operating revenues at present rates (column G, line 4) to
16		determine the pro forma increase in operating income. The increase in operating
17		income is then grossed up for the Indiana Utility Receipts Tax. The total proposed
18		increase in revenue requirements is \$6,753,988.
19	Q.	HOW IS THE ADDITIONAL IURT EXPENSE RESULTING FROM THE

PROPOSED INCREASE IN OPERATING INCOME DETERMINED?

20

- A. Exhibit LSP-1, page 18, line 7, shows the computation of the additional IURT expense that will result from Citizens' request to increase its revenues to recover its pro forma revenue requirement by increasing the operating income by the 1.4% IURT rate. The effect of that increase would result in an increase to IURT of \$94,556.
 - Q. PLEASE DESCRIBE PETITIONER'S EXHIBIT LSP-1, PAGE 19.

6

7 Α. Exhibit LSP-1, page 19 reflects the adjustments necessary to recognize the 8 requirements of the Commission's December 28, 2006 Order in Cause No. 43025, 9 which determined that two components of the Covanta Agreement (the demand 10 charge and O&M charge) were not fuel costs, and instead should be recovered in 11 Citizens' base rates. Operations & maintenance is increased \$2,630,256 to 12 recognize the two components of the Covanta Agreement in base rates. In 13 addition, fuel costs are increased \$389,537 to reflect the updated fuel cost rates as 14 provided for in the Covanta Agreement and authorized by the Commission to be 15 recovered as fuel costs, and the IURT will increase \$42,877 by applying the 1.4% 16 IURT rate to the increased revenue requirement.

17 Q. PLEASE EXPLAIN THE COVANTA AGREEMENT ADJUSTMENT.

A. On December 28, 2006, the Commission issued an Order in Cause No. 43025, a copy of which is attached to my testimony as Petitioner's Exhibit LSP-2. That Order recognized "that the retail steam Jurisdictional portion of the Base Steam

Direct Testimony of LaTona S. Prentice Petitioner's Exhibit LSP Citizens Thermal Energy IURC Cause No. 43201 Page No. 20 of 21

Payment, Summer Steam Payment and Incremental Chemical Costs as described in Article V of the [Covanta] Agreement are eligible for recovery through Citizens FAC Rider" (page 24). The Commission further found "the remaining charges of the [Covanta] Agreement are not eligible for recovery through this [FAC] mechanism" (page 25). The remaining charges are the Demand Charge and the O&M Charge, and the \$2,630,256 increase is reflective of those charges. The Commission found the Covanta Agreement to be just and economically reasonable to Citizens' retail steam ratepayers, and further noted on page 25 of its Order that Citizens agreed in a settlement agreement approved in Cause No.

Citizens agreed in a settlement agreement approved in Cause No. 41969-FAC03-S1 (January 23, 2004) to file a base rate case no later than January 1, 2007. The anticipated base rate case filing and timing of the implementation of the [Covanta] Agreement provides an opportunity for Citizens to update its base rates to include costs which are found to be known and measurable. (Emphasis added).

Q.

These costs are, and were found by the Commission to be, known and measurable today, and will become effective December 1, 2008. As a result, these costs should be included in Citizens' pro forma revenue requirements, effective December 1, 2008. Citizens' phase two rates would be based upon the increased revenue requirement summarized in Exhibit LSP-1, pages 1 and 2, column K. IN SUMMARY, DO YOU HAVE AN OPINION AS TO THE NECESSITY OF THE PRO FORMA ADJUSTMENTS MADE IN PETITIONER'S EXHIBIT

LSP-1 AND TO THE RESULTING AGGREGATE ANNUAL REVENUE

Direct Testimony of LaTona S. Prentice
Petitioner's Exhibit LSP
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REQUIREMENT FOR CITIZENS?

Yes, I do. In my opinion, each of the pro forma adjustments to test year data is necessary in order to properly reflect the appropriate pro forma revenue requirement for the provision of steam service. Citizens is not currently recovering its statutory revenue requirements and reasonably requires a phase one annual increase of \$6,753,988 in its base rates in order to produce a net operating income of \$6,521,688.

Effective December 1, 2008, phase two rates should be implemented to produce an additional \$3,062,670 in base rate revenues to permit Citizens to recover the Covanta Demand Charge and O&M Charge consistent with the Commission's December 28, 2006 Order. The phase two increase will continue to produce a net operating income of \$6,521,688 sufficient to recover Citizens' debt service, any working capital, and extensions & replacements in excess of depreciation.

Q. MS. PRENTICE, DOES THAT CONCLUDE YOUR DIRECT TESTIMONY IN THIS PROCEEDING?

15 A. Yes, it does.

A.

1	
2	<u>VERIFICATION</u>
3	
4	STATE OF INDIANA)
5) SS:
6	COUNTY OF MARION)
7	
8	The undersigned, LaTona S. Prentice, under penalties of perjury and being first duly
9	sworn on her oath, says that she is Executive Director of Rates and Regulatory
10	Affairs for Citizens Thermal Energy; that she caused to be prepared and read the
11	foregoing Direct Testimony; and that the representations set forth therein are true and
12	correct to the best of her knowledge, information and belief.
13	
14 15	\mathcal{L}
15 16	The Land State Leave
10 17	By: LaTona S. Prentice
18	Executive Director of Rates and Regulatory Affairs
19	Citizens Thermal Energy
20	· · · · · · · · · · · · · · · · · · ·
21	TU .
22	Subscribed and sworn to before me, a Notary Public, this 30 day of March 2007.
23	
24	She stulle Bell
25	Signature
26	
27	Shakisha Michalle Bell
28	Printed Name
29	1
30	My Commission Expires: Nay 8, 2008
31	
32	My County of Residence: May an
33	

Citizens Thermal Energy IURC Cause No. 43201 Index of Petitioner's Exhibit LSP-1

CITIZENS THERMAL ENERGY Index of Exhibit LSP-1

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Page 7	Customer Number Adjustment
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Citizens Thermal Energy IURC Cause No. 43201 Petitioner's Exhibit LSP-1 Page 1 of 19

CITIZENS THERMAL ENERGY Test Year Statement of Income and Pro Forma Revenue Requirement for the Twelve Months Ended September, 2006

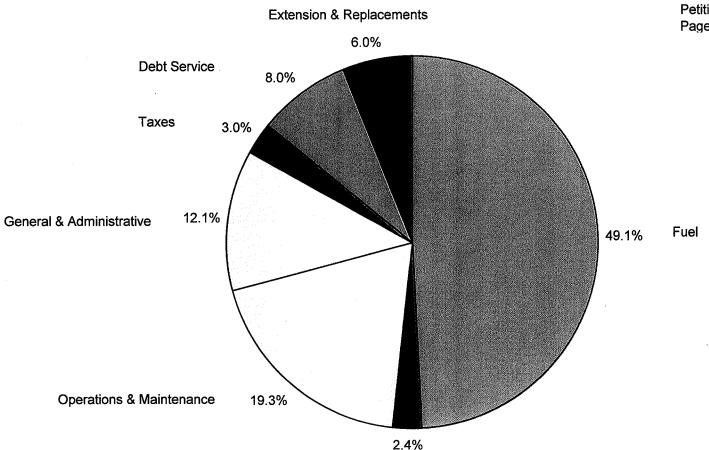
Α	В		С		D		E		F		G		н :		1		j		Κ .
	Revenue		Test Year							Pi	o forma Results			Pro	o forma Results		12/1/2008	12/1	/2008 Pro Forma
	Requirement		Income	St	eam Related		Total		Pro forma		at Current		Pro forma	bas	ed on Proposed		Pro Forma	Re	sults based on
Line No	. Description		Statement		css		Steam	/	Adjustments		Rates	Ad	ustments		Rates		Adjustments	Pr	oposed Rates
	Steam Operations Division														7 440 000				7 440 000
1	Sales - Dekatherms		7,183,930				7,183,930		228,130		7,412,060				7,412,060		 -		7,412,060
			7,183,930		***************************************		7,183,930		228,130		7,412,060				7,412,060				7,412,060
_	Operating Revenues										50.004.000	•	0.750.000	•	00 500 050	•	0.000.070	•	00.000.000
2	Steam Revenue	\$	49,746,392		-	. \$	49,746,392	ф	4,087,876		53,834,268	\$	6,753,988	Ф	60,588,256	Ф	3,062,670	Ф	63,650,926
3	Other Revenue		6,538			•	6,538		(6,538)		50.004.000		0.750.000		CO 500 050	Φ.	0.000.070	6	63,650,926
4	Total Operating Revenues	\$	49,752,930	\$	•	\$	49,752,930	\$	4,081,338	\$	53,834,268	\$	6,753,988	Þ	60,588,256	Þ	3,062,670	Þ	63,650,926
	Operating Expense																		
5	Fuel Cost	\$	27,672,554		-	\$	27.672.554	\$	3,214,466	\$	30,887,020	\$	_	\$	30,887,020	\$	389,537	· \$	31,276,557
6	Gross Margin	\$	22,080,376	\$			22,080,376	\$	866,872		22,947,248		6,753,988	\$	29,701,236	\$	2,673,133	\$	32,374,369
	011 - 0 - 1 - 10 - 1 - 10 - 11																		
~	Other Cost of Goods Sold Electric	\$	697.064	æ			697,064	æ	105,766	٠	802,830	•		\$	802,830	e		\$	802,830
,	Water & Sewer	Þ	178,255	Ф	•	Ф	178,255	Ф	38,671	Ф	216,926	Ф	•	Φ	216,926	Ð	•	Φ	216,926
9	Chemicals		420,874		•		420,874		114,201		535,075		•		535,075		-		535,075
_	Total Other Cost of Goods Sold		1,296,193	<u> </u>		•	1,296,193	•	258,638	-	1,554,831	-		\$	1,554,831	•	<u> </u>	\$	1,554,831
10	Total Other Cost of Goods Sold	Ф	1,296,193	Ф	•	Ф	1,290,193	Ф	200,000	Φ	1,554,651	Ф	; -	Φ	1,554,651	φ	-	Ψ	1,004,031
	Operations & Maintenance																		
11	Plant Operations	\$	2,565,035		-	\$	2,565,035	\$	-	\$	2,565,035	\$		\$	2,565,035	\$	-	\$	2,565,035
12	Plant Maintenance		3,575,981		-		3,575,981		652,319		4,228,300		-		4,228,300		2,630,256		6,858,556
13	Distribution Maintenance		2,533,396		-		2,533,396		-		2,533,396				2,533,396				2,533,396
14	Customer Operations/Metering Maintenance		323,818		-		323,818		-		323,818				323,818		-		323,818
15	Total Operations & Maint	\$	8,998,230	\$	-	\$	8,998,230	\$	652,319	\$	9,650,549	\$	-	\$	9,650,549	\$	2,630,256	\$	12,280,805
	General & Administrative								*										
16	Administrative & General	\$	1,184,994	\$	475,600	\$	1,660,594	\$	842,000	S	2,502,594	\$		\$	2,502,594	\$		\$	2,502,594
17	Outside Services	*	271.622	*		*	271,622	*	,	*	271,622	7	_	•	271,622	-		*	271,622
18	Employee Benefits		1,893,235		422,336		2.315,571		363,616		2,679,187				2,679,187				2,679,187
19	Corporate Support		2,690,604		(1,032,208)		1,658,396		-		1,658,396				1,658,396				1,658,396
20	Other Administrative & General		406,310		,002,200/		406,310		163,079		569,389				569,389		_		569,389
21	Total General & Admin	\$		\$	(134.272)	\$	6,312,493	\$	1,368,695	\$	7,681,188	\$		\$	7,681,188	\$		\$	7,681,188

Citizens Thermal Energy IURC Cause No. 43201 Petitioner's Exhibit LSP-1 Page 2 of 19

CITIZENS THERMAL ENERGY Test Year Statement of Income and Pro Forma Revenue Requirement for the Twelve Months Ended September, 2006

Α	В	С		D	E		F		G		н .		f	J		к
Line No.	Revenue Requirement Description	Test Year Income Statement	Ste	am Related CSS	 Total Steam		Pro forma	Pro	o forma Results at Current Rates		Pro forma ustments		forma Results ed on Proposed Rates	 12/1/2008 Pro Forma Adjustments	Re	/2008 Pro Forma esults based on roposed Rates
22 23 23	Depreciation & Amortization Depreciation Amortization Total Depreciation & Amortization	\$ 1,502,222 187,152 1,689,374		52,223 52,223	\$ 1,554,445 187,152 1,741,597		701,380 - 701,380		2,255,825 187,152 2,442,977		-	\$	2,255,825 187,152 2,442,977	 	\$	2,255,825 187,152 2,442,977
24 25 26 26	<u>Taxes</u> Property Tax Payroll & Miscellaneous Indiana Utility Receipts Tax Total Taxes	\$ 438,831 406,790 668,853 1,514,474		10,279 71,770 82,049	449,110 478,560 668,853 1,596,523		(27,231) 101,328 84,827 158,924		421,879 579,888 753,680 1,755,447	·	94,556 94,556	·	421,879 579,888 848,236 1,850,003	42,877 42,877	\$	421,879 579,888 891,113 1,892,880
27	Total Operating Expenses	\$ 47,617,590	\$_	<u> </u>	\$ 47,617,590	\$_	6,354,422	\$_	53,972,012	\$_	94,556	\$	54,066,568	\$ 3,062,670	\$	57,129,238
28	Operating Income	\$ 2,135,340	\$		\$ 2,135,340	\$		\$	(137,744)	\$	6,659,432	\$	6,521,688	 	\$	6,521,688
29 30 31	Other Fund Regulrements Debt Service Working Capital Extension & Replacements							\$	5,118,068 3,846,597	\$	- : •	\$	5,118,068 3,846,597	\$	\$	5,118,068 3,846,597
32	Cash Requirement Offset Depreciation								(2,442,977)				(2,442,977)			(2,442,977)
33	Total Revenue Requirement							\$	60,493,700	\$	94,556	\$	60,588,256	\$ 3,062,670	\$	63,650,926
34	Revenue Requirement Deficit							\$	(6,659,432)	\$	6,659,432	\$	(0)	\$ 00	\$	(0)

CITIZENS THERMAL ENERGY PRO FORMA REVENUE REQUIREMENTS



Other Cost of Goods Sold

Citizens Thermal Energy IURC Cause No. 43201 Petitioner's Exhibit LSP-1 Page 3 of 19

CITIZENS THERMAL ENERGY Summary of Pro Forma Revenue Requirement

Line No.	•	orma Results I on Proposed Rates	P	2/1/2008 ro Forma ljustments	Res	2008 Pro Forma sults based on oposed Rates	Reference
	Operating Revenues						
1	Test year revenues	\$ 49,752,930					page 1 .
2	Pro forma increase to operating revenues for weather	1,500,807					page 6
3	Pro forma increase to operating revenues for customers	317,542					page 7
4	Pro forma decrease to operating revenues for unbilled	(33,788)					page 8
5	Pro forma decrease to operating revenues for test year adjustments	(76,181)					page 8
6	Pro forma decrease to operating revenues for change in average customer charge	(15,225)					page 8
7	Pro forma increase to operating revenues for change in fuel price	2,394,721					page 8
8	Pro forma decrease to operating revenues for miscellaneous revenue	 (6,538)					page 9
9	Pro forma Operating Revenue	\$ 53,834,268					
10	Pro forma Increase for Covanta Contract		\$	3,062,670			page 19
11	Pro forma Increase at present rates			6,753,988			page 1
12	Total Operating Revenues				\$	63,650,926	
	Fuel Cost						
13	Test year fuel costs	\$ 27,672,554					page 1
14	Pro forma increase to fuel for weather	834,548					page 6
15	Pro forma increase to fuel for customers	100,107					page 7
16	Pro forma decrease to fuel for unbilled	(15,195)					page 8
17	Pro forma decrease to fuel for test year adjustments	(101,084)					page 8
18	Pro forma increase to fuel for change in fuel price	2,394,721					page 8
19	Pro forma increase to fuel for rounding	6,567					page 8
20	Pro forma decrease to fuel for IRRF secondary steam	 (5,198)					page 8
21	Pro forma Fuel Costs	\$ 30,887,020					
22	Pro forma Increase for Covanta Contract		_\$	389,537			page 19
23	Pro forma Fuel Costs 12/1/2008				\$	31,276,557	
	Other Cost of Goods Sold						
24	Test year other cost of goods sold	\$ 1,296,193					page 1
25	Pro forma increase to fuel for electricity demand	105,766					page 10
26	Pro forma increase to fuel for sewer	38,671					page 10
27	Pro forma increase to fuel for chemicals	114,201					page 10
28	Pro forma Other Cost of Goods Sold	\$ 1,554,831	\$	-	\$	1,554,831	
	Operations & Maintenance						
29	Test year operations & maintenance	\$ 8,998,230					page 11
30	Adjustment for environmental	39,000					page 11
31	Adjustment for pump parts	65,339					page 11
32	Adjustment for contracted services	217,632					page 11
33	Adjustment for real estate rental license	61,905					page 11
34	Adjustment for sludge	8,933					page 11
35	Adjustment for plant electrical system upgrade	29,166					page 11
36	Adjustment for ash	230,344					page 11
37	Pro forma Operations and Maintenance	\$ 9,650,549					
38	Adjustment for Covanta O & M		\$	2,630,256			page 19
39	Pro forma Operations & Maintenance 12/1/2008				\$	12,280,805	
	General & Administrative Expense						
40	Test year general & administrative expense	\$ 6,312,493					page 1
41	Pro forma increase to payroll adjustment	842,000					page 12
42	Pro forma decrease to pension	(129,870)					page 13
43	Pro forma increase to payroll-related employee benefit	72,786					page 13
44	Pro forma increase to non payroll-related employee benefit	420,700					page 13
45	Pro forma increase to equipment incentive rebate expense	1,800					page 14
46	Pro forma increase to reflect removal of manufacturing non-payroll	47,820					page 14
47	Pro forma increase to regulatory expense	31,200					page 14
48	Pro forma decrease to insurance expense	(65,264)					page 14
49	Pro forma amortization of rate case expense	 147,523					page 14
50	Pro forma General & Adminstrative Expense	\$ 7,681,188	\$		- \$	7,681,188	

CITIZENS THERMAL ENERGY Summary of Pro Forma Revenue Requirement

Line No.					_	Reference
51 52	Depreciation & Amortization Test year depreciation & amortization Increase depreciation	\$	1,741,597 701,380			page 15 page 15
53	Pro forma Depreciation & Amortization	\$	2,442,977	\$ -	\$ 2,442,977	
54 55 56	Taxes Test year taxes Increase in payroll taxes Decrease in property tax	\$	1,596,523 101,328 (27,231)			page 1 page 16 page 17
57	Increase in IURT at present rates		84,827			page 18
58 59 60 61	Pro forma Taxes IURT on Phase I increase IURT on Phase II increase Pro forma Taxes including Phase I & II	\$	1,755,447	\$ 94,556 42,877	\$ 1,892,880	page 18 page 19
	Other Funds Requirements					
62 63 64	Long-term interest and principal Interest income Debt Service	\$ 	5,267,722 (149,654) 5,118,068	\$	\$ 5,118,068	MDS - 1 MDS - 2
65	Working Capital	\$	-			
66	Extensions and Replacements	\$	3,846,597	\$ -	\$ 3,846,597	JOD - 1
67	Cash Requirement Offsets Depreciation & Amortization	_\$	(2,442,977)	\$ -	\$ (2,442,977)	page 15
68	Pro forma Revenue Requirement before IURT increase		60,493,700		\$ 63,650,926	
69	Subtotal Revenue Requirement Deficit		6,659,432		\$ (0)	
70	Additional IURT on Revenue Requirement Deficit - Phase I	\$	94,556		\$ 	
71	Total Revenue Requirement Deficit	\$	6,753,988		\$ 	

Citizens Thermal Energy IURC Cause No. 43201 Petitioner's Exhibit LSP-1 Page 6 of 19

CITIZENS THERMAL ENERGY Normal Weather Adjustment

		Α	В	С	D	E Rate 3	F Rate 3	G	н
Line No		HDD	CDD	Rate 1	Rate 2	Covanta Steam	CTE Steam	Customer Contract	Total
1	Margin Adjustment: Adjusted Test Year Therms			2,725,074	32,104,042	8,637,760	3,711,549	24,630,923	71,809,348
2	Base Load Therms			632,712	19,484,700	41,208	229,151	17,366,892	37,754,663
3	Test Year Heat/Cool Load Therms	4,999	1,063	2,092,362	12,619,342	8,596,552	3,482,398	7,264,031	34,054,685
4	Normal Heat/Cool Load Therms	5,521	1,042	2,543,122	14,104,820	8,598,738	2,731,223	8,117,783	36,095,686
5	Normal Temp Adjustment	522	(21)	450,760	1,485,478	2,186	(751,175)	853,752	2,041,001
6	Test Year Volumetric Margin			\$ 0.80808	\$ 0.10603	\$ 0.06684	\$ 0.08303	\$ 0.24214	
7	Normal Temperature Margin Adjustme	ent		\$ 364,250	\$ 157,505	\$ 146	\$ (62,370)	\$ 206,728	\$ 666,259
8	Fuel Cost Adjustment: Normal Temp Adjustment			450,760	1,485,478	2,186	(751,175)	853,752	2,041,001
9	Test Year Fuel Cost per Therm			\$ 0.40690	\$ 0.41548	\$ 0.14279	\$ 0.42922	\$ 0.41706	
10	Normal Temperature Fuel Cost Adjust	tment		\$ 183,414	\$ 617,180	\$ 312	\$ (322,421)	\$ 356,063	\$ 834,548
11	Revenue Adjustment			\$ 547,664	\$ 774,685	\$ 458	\$ (384,791)	\$ 562,791	\$ 1,500,807

Citizens Thermal Energy IURC Cause No. 43201 Petitioner's Exhibit LSP-1 Page 7 of 19

CITIZENS THERMAL ENERGY Customer Number Adjustment

		Α	В	C Rate 3	D Rate 3	E	F
Line No		Rate 1	Rate 2	Covanta Steam	CTE Steam	Customer Contract	Total
1	Margin Adjustment: Change in Customer Demand - Therms		563				
2	Demand Rate		\$ 104.39				
3	Increased Demand Charge	\$ -	\$ 58,765	\$ -	\$ -	\$	\$ 58,765
4	Change in Customer Therms	97,729	178,883	0	0	0	
- 5	Energy Charge Margin	\$ 0.80808	\$ 0.10603	\$ 0.06684	\$ 0.08303	\$ 0.24214	
6	Increased Energy Charge Margin	\$ 78,973	\$ 18,967	_\$	\$ -	\$ -	\$ 78,973
7	Reclass Customer		\$ (29,262)				
8	Net Change in Energy Charge Margin		\$ (10,295)				\$ (10,295)
9	Net Change in Annual Meter/Customer Count	802	(6)	0	0	0	
10	Test Year Avg. Customer Charge	\$ 112.21					
11	Increased Customer Charge	\$ 89,992	\$ -	_\$	\$ -	\$ -	\$ 89,992
12	Customer Number Adjustment	\$ 168,965	\$ 48,470	\$ -	<u>\$</u>	\$	\$ 217,435
13	Fuel Cost Adjustment: Change in Customer Therms	97,729	145,233	0	0	0	
14	Test Year Fuel Cost per Therm	\$ 0.40690	\$ 0.41548	\$ 0.14279	\$ 0.42922	\$ 0.41706	
15	Customer Number Fuel Cost Adjustment	\$ 39,766	\$ 60,341	<u> </u>	\$	\$	\$ 100,107
16	Revenue Adjustment	\$ 208,731	\$ 108,811	\$ <u>-</u>	\$ -	\$ -	\$ 317,542

CITIZENS THERMAL ENERGY Other Adjustments

		Α			В	Ra	C Rate 3 Covanta		D ate 3	E			F
Line No	_		Rate 1		Rate 2		anta eam		CTE team	Cust	tract		Total
1	Unbilled Energy Charge	\$	(18,593)	\$	-	\$	-	\$	-	\$	-	\$	(18,593)
2	Unbilled Fuel Charge		(15,195)										(15,195)
3	Unbilled Fuel Revenue	\$	(33,788)	\$		_\$	-	\$		\$	-	\$	(33,788)
4	Test Year Billing Adj Energy Charge	\$	19,323	\$	5,220	\$	-	\$	360	\$	-	\$	24,903
5	Test Year Billing Adj Fuel Cost	\$	8,880	\$	15,731	\$(12	5,695)	\$		\$		\$	(101,084)
6	Test Year Billing Adj Revenue	\$	28,203	\$	20,951	\$(12	5,695)	\$	360	\$			(76,181)
7	Change in Avg. Customer Charge: Proforma Meter Count		2,025										
8	Test Year Avg. Customer Charge	\$	112.21										
9	Proforma Avg. Customer Charge		104.69										
10	Change in Avg. Customer Charge	\$	(7.52)										
11	Avg. Customer Charge Adjustment	\$	(15,225)										
12	Change in Fuel Price: Proforma Sales - Therms		3,267,198	. 33	,768,403	8,63	9,946	2,96	60,374	25,484	1,675	74,	,120,596
13	Test Year Fuel Cost per Therm	\$	0.40690	\$	0.41548	\$ 0.1	4279	\$ 0.	42922	\$ 0.4	1706		
14	Proforma Fuel Cost per Therm		0.44531		0.44531	0.2	0000	0.	44531	0.4	4531		
15	Change in Fuel Cost per Therm	\$	0.03841	\$	0.02983	\$ 0.0	5721	\$ 0.	01609	\$ 0.0	2825		
16	Fuel Price Adjustment	\$	125,485	\$ 1	,007,374	\$ 494	4,269	\$ 4	17,618	\$ 719	,975	\$ 2	,394,721
17	Fuel Cost Rounding											\$	6,567
18	Remove IRRF Secondary Cost											\$	(5,198)

Citizens Thermal Energy IURC Cause No. 43201 Petitioner's Exhibit LSP-1 Page 9 of 19

CITIZENS THERMAL ENERGY Computation of Pro Forma Other Revenue

No.		
1	Test Year Other Revenue	\$6,538
2	Pro forma Adjustment to Other Revenue	(6,538)
3	Pro forma Other Revenue	\$0

Citizens Thermal Energy IURC Cause No. 43201 Petitioner's Exhibit LSP-1 Page 10 of 19

CITIZENS THERMAL ENERGY Computation of Pro Forma Non-Fuel Cost of Goods Sold

Line No.	_	
1	Test Year Cost of Goods Sold	\$ 1,296,193
2	Pro forma Adjustment to Electric Demand Charge	105,766
3	Pro forma Adjustment to Sewer	38,671
4	Pro forma Adjustment to Chemicals	114,201_
5	Pro forma Cost of Goods Sold	\$ 1,554,831

Citizens Thermal Energy IURC Cause No. 43201 Petitioner's Exhibit LSP-1 Page 11 of 19

CITIZENS THERMAL ENERGY Computation of Pro Forma Operations & Maintenance

Line No.	_	
1	Test Year Operations and Maintenance	\$ 8,998,230
2	Pro forma Increase for Environmental	39,000
. 3	Pro forma Increase for Pump Parts	65,339
4	Pro forma Increase for Contracted Services	217,632
5	Pro forma Increase for Plant Electrical System Upgrade	29,166
6	Pro forma Increase for Real Estate Rental License	61,905
7	Pro forma Increase for Sludge	8,933
8	Pro forma Increase for Ash	230,344
9	Pro forma Operations & Maintenance	\$ 9,650,549

Citizens Thermal Energy IURC Cause No. 43201 Petitioner's Exhibit LSP-1 Page 12 of 19

CITIZENS THERMAL ENERGY Computation of Pro Forma Payroll Expense

Line No.	_		
1	Pro forma Annualized Payroll Expense	\$ 6	6,177,384
2	Pro forma Capitalized Payroll		(115,232)
3	Pro forma Overtime Expense		651,282
4	Pro forma Supplemental Pay		785,195
5	Pro forma Payroll Expense	\$	7,498,629
6	Test Year Payroll Expense		6,656,629
7	Pro forma Payroll Increase	\$	842,000

Citizens Thermal Energy IURC Cause No. 43201 Petitioner's Exhibit LSP-1 Page 13 of 19

CITIZENS THERMAL ENERGY Computation of Pro Forma Employee Benefits Expense

Line No.		
1	Test Year Employee Benefits Expense	\$1,893,235
2	Test Year Employee Benefits - CSS Allocation to Steam	422,335
	Payroll-Related Employee Benefits:	
3	Pro forma Disability Adjustment	12,129
4	Pro forma Citizens Gas 457 (B) Plan Adjustment	28,136
5	Pro forma Employee Thrift Plan Adjustment	32,521
6	Pro forma Payroll Related Employee Benefits Expense Adjustment	\$ 72,786
	Non-Payroll Related Employee Benefits:	
7	Pension Adjustment	(\$129,870)
8	Insurance Adjustment	416,485
9	Other Benefits	934
10	Post Retirement Benefits Adjustment	3,281
11	Pro forma Non-Payroll Related Employee Benefits	\$ 290,830
12	Total Pro forma Employee Benefits	\$2,679,186

Citizens Thermal Energy IURC Cause No. 43201 Petitioner's Exhibit LSP-1 Page 14 of 19

CITIZENS THERMAL ENERGY Computation of Pro Forma Other General & Administration Expense

Line No.	-	
1	Test Year General & Administrative Expenses	\$ 406,310
2	Pro forma Increase to Regulatory Expense	31,200
3	Pro forma Decrease to Insurance Expense	(65,264)
4	Pro forma Amortization of Rate Case Expense	147,523
5	Pro forma Increase to Equipment Incentive Rebate Expense	1,800
6	Pro forma Increase to Reflect Removal of Manufacturing Non-payroll	 47,820
7	Pro forma Other General & Administrative Expense	\$ 569,389

Citizens Thermal Energy IURC Cause No. 43201 Petitioner's Exhibit LSP-1 Page 15 of 19

CITIZENS THERMAL ENERGY Determination of Pro Forma Depreciation Expense

Line No.		
1	Test Year Depreciation & Amortization Expense - Steam	\$1,689,374
2	Test Year Depreciation Expense - CSS to Steam	52,223
3	Adjustment to Depreciation	701,380
4	Pro forma Depreciation Expense	\$ 2,442,977

Citizens Thermal Energy IURC Cause No. 42767 Petitioner's Exhibit LSP-1 Page 16 of 19

CITIZENS THERMAL ENERGY Determination of Pro Forma Payroll Tax Expenses

Line No.			
1	Pro forma Taxable Payroll \$ 7,794,150)	
2	Less: Payroll Exempt from Social Security Tax (473,197	<u>')</u>	
3	Payroll Subject to FICA Tax \$ 7,320,953	<u>3</u>	
4	Pro forma Social Security Tax at 6.2%	\$	453,899
5	Pro forma SUTA Tax		12,974
6	Pro forma Medicare Tax at 1.45%		113,015
7	Pro forma Payroll Tax Expenses	\$	579,888
8	Test Year Payroll Tax Expenses - Steam		406,790
9	Test Year Payroll Tax Expenses - CSS to Steam		71,770
10	Test Year Payroll Tax Expenses	\$	478,560
11	Pro forma Increase to Payroll Tax Expenses	\$	101,328

Citizens Thermal Energy IURC Cause No. 43201 Petitioner's Exhibit LSP-1 Page 17 of 19

CITIZENS THERMAL ENERGY Determination of Pro Forma Property Tax

Line No.		
1 2	Test Year Property Tax Expense - Steam Test Year Property Tax Expense - CSS to Steam	\$ 438,831 10,279
3	Pro forma Decrease in Property Tax	 (27,231)
4	Pro forma Property Tax Payment	 421,879

Citizens Thermal Energy IURC Cause No. 43201 Petitioner's Exhibit LSP-1 Page 18 of 19

CITIZENS THERMAL ENERGY Determination of Pro Forma Indiana Utility Receipts Tax Expense

Line No.		
1	Pro forma Revenue at Present Rates Subject to IURT	\$ 53,834,268
2 ,	Indiana Utility Receipts Tax @1.40%	753,680
3	Test Year IURT Expense	668,853
4	Pro forma IURT Increase Due to Increased Revenues at present Rates	\$ 84,827
	Increase in Tax Due to Increase in Revenue Requirement:	
5	Pro forma Revenue Requirement Deficit Subject to IURT	6,659,432
6	Deficit Adjusted for IURT (line 5 / (1014))	6,753,988
7	Pro forma Tax Increase to Reflect Revenue Requirement Deficit	\$ 94,556

Citizens Thermal Energy IURC Cause No. 43201 Petitioner's Exhibit LSP-1 Page 19 of 19

CITIZENS THERMAL ENERGY Computation of Covanta Contract Impact Effective 12/1/2008 Effective 12-1-08

Line No.		
1	Pro forma increase in operations & maintenance	\$ 2,630,256
2	Pro forma increase in fuel cost	389,537
3	Pro forma increase subject to IURT	\$ 3,019,793
4	Increase adjusted for IURT (line 3 / (1014))	3,062,670
5	Pro forma IURT increase to reflect Covanta contract at 12/1/08	\$ 42,877

Citizens Thermal Energy IURC Cause No. 43201 Petitioner's Exhibit LSP-2

(Rec



INDIANA UTILITY REGULATORY COMMISSION

PETITION OF THE BOARD OF DIRECTORS)
	, ·
FOR UTILITIES OF THE DEPARTMENT OF)
PUBLIC UTILITIES OF THE CITY OF)
INDIANAPOLIS, AS SUCCESSOR TRUSTEE OF)
A PUBLIC CHARITABLE TRUST, D/B/A)
CITIZENS THERMAL ENERGY, FOR)
APPROVAL OF A STEAM PURCHASE) CAUSE NO. 43025
AGREEMENT WITH COVANTA)
INDIANAPOLIS, INC. AND AUTHORITY TO)
RECOVER THE RETAIL JURISDICTIONAL)
COSTS INCURRED UNDER SAID AGREEMENT) APPROVED:
THROUGH PETITIONER'S STANDARD	DEC 2 8 2006
CONTRACT RIDER NO. 1, FUEL COST)
ADJUSTMENT)

BY THE COMMISSION:

Gregory D. Server, Commissioner Abby R. Gray, Administrative Law Judge

On April 26, 2006, the Board of Directors for Utilities of the Department of Public Utilities of the City of Indianapolis, as Successor Trustee of a Public Charitable Trust, D/B/A Citizens Thermal Energy ("Petitioner" or "Citizens") filed with the Indiana Utility Regulatory Commission ("Commission") its Petition in this Cause requesting the Commission to (i) find reasonable and approve a Steam Purchase Agreement dated December 9, 2005 (the "Proposed Agreement"), that Petitioner entered into with Covanta Indianapolis, Inc. ("Covanta") and (ii) authorize Citizens to recover the retail jurisdictional costs incurred under the Proposed Agreement through its Standard Contract Rider No. 1, Fuel Cost Adjustment ("FAC Rider"). The Proposed Agreement is a replacement agreement to an existing agreement between Petitioner and Covanta that originated in 1986 (the "Existing Agreement").

On May 4, 2006, Eli Lilly & Company and National Starch & Chemical Company, designated collectively as Citizens Thermal Energy Large Volume Customers ("Large Volume Customers"), filed a *Petition to Intervene* in this Cause. The Large Volume Customers' petition to intervene was granted by the Presiding Officers in a docket entry issued on May 12, 2006.

On June 5, 2006, Petitioner filed a Motion to Waive Prehearing Conference and Establish Procedural Schedule. In that motion, Petitioner requested that a prehearing conference be waived and proposed a procedural schedule that had been agreed to by the Large Volume Customers and the Indiana Office of Utility Consumer Counselor ("OUCC"). The Presiding Officers granted Petitioner's Motion to Waive Prehearing

Conference and Establish Procedural Schedule in a docket entry issued on June 8, 2006, which established a procedural schedule for this Cause, including a public evidentiary hearing to commence on August 18, 2006.

On May 12, 2006, Petitioner prefiled its prepared case-in-chief testimony and exhibits. On July 7, 2006, and July 11, 2006, respectively, the Large Volume Customers and the OUCC prefiled their prepared case-in-chief testimony. On July 28, 2006, the OUCC prefiled an inadvertently omitted portion of its prepared case-in-chief testimony. On August 8, 2006, and August 17, 2006, respectively, Petitioner prefiled its prepared rebuttal testimony and prepared supplemental rebuttal testimony.

Pursuant to notice as provided by law, proof of which was incorporated into the record and placed in the Commission's official files, a public evidentiary hearing was commenced on August 18, 2006, at 9:30 a.m. in Room E306, Indiana Government Center South, Indianapolis, Indiana. At the hearing, the prefiled testimony and exhibits described above were admitted into the record and certain witnesses were cross examined.

On September 20, 2006, the Commission entered an Order on Less Than All Issues in this Cause approving a Stipulation and Settlement Agreement entered into by the parties. The Stipulation and Settlement Agreement resolved all issues raised by Petitioner's Motion for Relief Conditional on Outcome of Proceeding and for Leave to File Supplemental Testimony in Support Thereof and the Large Volume Customers' Verified Motion for Mediation in Response to Citizens' Motion for Relief Conditional on Outcome of Proceeding filed on July 24, 2006, and July 31, 2006, respectively. A public evidentiary hearing on those matters was held on August 31, 2006.

Based on the applicable law and the evidence of record, the Commission now finds:

- 1. Notice and Jurisdiction. Notice of the public evidentiary hearing held on August 18, 2006, was given as required by law. Petitioner is a municipal steam utility subject to the jurisdiction of this Commission in the manner and to the extent provided by the laws of the State of Indiana, including certain sections of the Public Service Commission Act, as amended. Therefore, the Commission has jurisdiction over the parties and the subject matter of this proceeding.
- 2. <u>Petitioner's Steam Business</u>. Citizens is a municipal steam utility that maintains its principal offices and provides steam service in Marion County, Indiana. It owns, operates, manages and controls plant and equipment used for the production, distribution and furnishing of steam utility service to the public. Citizens provides steam service to approximately 220 customers in the City of Indianapolis through steam production and distribution facilities purchased in November 2000 from Indianapolis Power & Light Company ("IPL"). Citizens' purchase of those facilities from IPL was approved by this Commission in its October 4, 2000, Order in Cause No. 41716.

3. Petitioner's Case-in-Chief Testimony.

Overview of Citizens' Steam Supply Resources, Experience with Covanta and the Proposed Agreement. Mr. William A. Tracy, Petitioner's Senior Vice President of Operations, provided an overview of Citizens' steam supply resources, past experience with Covanta and the Proposed Agreement. He testified that eight steam boilers and related facilities housed at Petitioner's Perry K steam production plant are the primary sources of the steam Petitioner distributes to the public. Citizens also purchases steam produced at the Indianapolis Resource Recovery Facility (the "IRRF"), which is a waste-to-energy facility owned and operated by Covanta. Pursuant to the Existing Agreement, which originated in 1986 and was assigned to Citizens by IPL, the IRRF supplies over 40 percent of the steam required for Citizens to meet its customers' annual steam requirements. The Commission approved the Existing Agreement on March 19, 1986, pursuant to the Commission's 30-day filing procedure and Indiana Code Section 8-1-2.4-4. Various modifications to the Existing Agreement have also been approved pursuant to the Commission's 30-day filing procedure. Pursuant to its FAC Rider, Citizens periodically adjusts its rates and charges for steam service to reflect, among other things, changes in the cost of fuel and the cost of purchases from Covanta incurred to supply steam to Petitioner's retail customers. (Pet. Exh. A at 4-5; Pet. Exh. A-1 at 2-4)

The Existing Agreement, as amended, expires on November 30, 2008. Pursuant to a provision in the Existing Agreement requiring the negotiation of a replacement agreement, Petitioner and Covanta began discussions in early 2005 to negotiate a new steam purchase agreement. The Proposed Agreement is the result of those negotiations. Subject to Commission approval, the effective date of the Proposed Agreement is December 1, 2008. (Pet. Exh. A-1 at 3) Citizens met with several of its large steam customers to discuss the Proposed Agreement, prior to seeking its approval and initiating this proceeding. (Tr. at A-55, A-56)

Mr. Tracy testified that the steam purchased from Covanta is one of the least expensive resources used to supply steam to Citizens' customers. As a result, Citizens purchases as much steam as possible from Covanta to displace steam using coal, natural gas and No. 2 Fuel Oil as a fuel source. Relative to other fuel supplies (i.e., coal, natural gas, coke oven gas and No. 2 Fuel Oil), steam purchased from Covanta accounted for 46% of the steam delivered to customers during 2005. (Pet. Exh. A at 5-6)

Mr. Tracy stated that under the Proposed Agreement, steam produced at the IRRF by Covanta will remain one of Citizens' least expensive supply resources. Mr. Tracy also described other benefits that Citizens and its customers realize as a result of making purchases from Covanta. He testified that the IRRF is a reliable source of steam operated by an experienced and proven company. Covanta and its affiliates operate over 30 large-scale waste-to-energy facilities predominantly located in the United States. Mr. Tracy emphasized that Citizens' purchases of steam from Covanta provide Citizens a diversified portfolio, lower Citizens' operating and maintenance costs by reducing the amount of steam produced at the Perry K plant and further the policy of the State to

encourage the development of cost-effective alternate energy production facilities, including waste-to-energy facilities such as the IRRF. Mr. Tracy explained that Citizens' resource planning strategy is to maintain existing resources and, to the extent possible, avoid expensive capital investments that would lead to higher rates for customers. Mr. Tracy stated that approval of the Proposed Agreement and continued purchases of steam produced at the IRRF are necessary for Citizens to execute that strategy. (*Id.* at 7-8)

At the hearing, Mr. Tracy was cross-examined about Covanta's reliability and supply obligations under the Proposed Agreement. Mr. Tracy emphasized that Covanta has been and is expected to continue to be a reliable supplier of steam.

Mr. Tracy next testified regarding the negotiation of the Proposed Agreement. He explained that the Proposed Agreement is an arms-length agreement negotiated by two unaffiliated commercial entities. Mr. Tracy stated that because the costs of steam purchased from Covanta are passed through directly to customers through Citizens' FAC Rider, Citizens negotiated the Proposed Agreement with its customers' interests in mind. He testified that Citizens' objectives during the negotiations were focused on price (pricing and other terms that would result in the lowest overall cost to customers), providing Covanta an incentive to maximize the output of the IRRF during the winter heating season, reliability and quality. (Id. at 8–9)

Mr. Tracy opined that Citizens achieved its objectives and negotiated a very favorable agreement that will provide benefits for Citizens' customers for years to come. As an example, Mr. Tracy pointed out the inclusion of a Winter Incentive Premium in the Proposed Agreement, which is designed to provide Covanta an incentive to produce more steam during the winter months when steam usage is at its highest. With respect to quality and reliability, Mr. Tracy explained that the Proposed Agreement sets forth obligations that will ensure Citizens and Covanta work together regarding maintenance of the IRRF and coordinate operations during planned and unplanned outages. He also discussed specific quality requirements that are set forth in the Proposed Agreement to ensure Citizens meets its customers' steam quality needs related to food and milk products and pharmaceutical manufacturing. (*Id.* at 9–10)

Mr. Tracy testified that the Proposed Agreement recognizes this Commission's oversight role regarding Citizens' steam purchases from Covanta. He pointed out that Commission approval is a condition precedent to the Proposed Agreement's effectiveness. He also explained that the Proposed Agreement obligates the parties to furnish each other information necessary to verify payments or other obligations under the Proposed Agreement and, subject to the ability to seek protection of confidential information, to make such information available to the Commission. (*Id.* at 10)

Finally, Mr. Tracy explained that the term of the Proposed Agreement, which begins on December 1, 2008, is 20 years. However, either party can terminate the Proposed Agreement by providing written notice 30 months in advance of such termination. Thus, Mr. Tracy explained, if technological or other developments cause

another resource option to become more economical than the Proposed Agreement, Citizens will be able to take advantage of that option. (Id. at 11-12)

- B. Citizens' Steam Supply Resources and Operational and Pricing Provisions of the Proposed Agreement. Mr. James O. Dillard, General Manager, Facilities and Engineering, for Citizens' thermal energy division testified regarding the supply resources Citizens utilizes to serve its steam customers. Mr. Dillard also described the operational and pricing features of the Proposed Agreement. Finally, Mr. Dillard discussed the alternatives to purchasing steam from Covanta that Citizens considered.
- (1) Steam Supply Resources. Mr. Dillard testified that Citizens sends out approximately 81,000,000 therms of steam per year. On the peak winter day, Citizens needs approximately 1,500,000 lbs/hour of steam to meet its system demand. He explained that Citizens produces the majority of its steam requirements with the eight steam boilers at its Perry K plant, which include three coal-fired boilers, two boilers that burn No. 2 Fuel Oil and three that burn coke oven gas or natural gas. The balance of Citizens' steam supply is produced at the IRRF and purchased from Covanta. Mr. Dillard stated that Citizens purchases approximately 42,000,000 therms per year of steam from Covanta, representing approximately one-half of Citizens' annual steam send-out. (Pet. Exh. B at 3-4)

Mr. Dillard explained that Citizens dispatches its steam supply resources on a least cost basis. Typically, steam purchases from Covanta and Citizens' coke oven gas boilers are dispatched first because they are the lowest cost resources. Steam produced with coal, natural gas and No. 2 Fuel Oil are dispatched next in that order. During most of the year, steam purchased from Covanta and produced with coke oven gas is sufficient to meet Citizens' requirements. During the winter heating season, however, significant amounts of natural gas are often required to supplement the lower cost fuels. (*Id.* at 4)

Mr. Dillard next discussed how the cost of the various steam supply resources Citizens utilizes compare to each other. He emphasized that to make a valid comparison of steam purchased from Covanta to steam produced at the Perry K plant, it must be recognized that steam purchased from Covanta is a finished product. Thus, the cost of that finished product cannot be compared directly to the cost of any of the various fuels used to produce steam at the Perry K plant, because Citizens incurs other costs to produce that steam, such as operating and maintenance costs. Furthermore, Mr. Dillard stated that the cost to produce steam at the Perry K plant is affected by boiler and plant efficiencies. Taking those additional costs into account, Mr. Dillard provided a comparison of the cost to produce steam at the Perry K plant to the cost of purchasing steam from Covanta under the Existing Agreement based on the 12 months ending September 30, 2005:

	Existing Agreement	Proposed Agreement
Covanta Primary ¹	\$2.80/Dth	\$4.14/Dth
Coke oven gas	\$3.90/Dth	\$3.90/Dth

¹ Covanta Primary refers to steam used to serve customers under Rate 1, Rate 2 and Rate 3B of Citizens' tariff.

 Coal
 \$4.50/Dth
 \$4.50/Dth

 Natural Gas
 \$12.80/Dth
 \$12.80/Dth

 No. 2 Fuel Oil
 \$14.40/Dth
 \$14.40/Dth

(Id. at 5, 16)

(2) Operational Features of the Proposed Agreement. Mr. Dillard next testified regarding the operational features of the Proposed Agreement. Under the Proposed Agreement, the parties generally have reciprocal obligations to sell and buy the IRRF's available production in an amount at least equal to 29 million therms annually. Mr. Dillard explained that Citizens' and Covanta's operations will be coordinated by an Operating Committee. The Operating Committee will coordinate all maintenance activities at the IRRF and the Perry K plant in order to minimize disruptions to their respective operations. The Operating Committee also will be responsible for facilitating communications and information exchanges as well as establishing and implementing procedures governing dispatch of the IRRF. Although Citizens' dispatch procedures may be adjusted slightly to ensure compliance with the minimum annual purchase requirement established in the Proposed Agreement, Mr. Dillard stated that any such changes will not affect the overall cost of steam because steam purchased from Covanta pursuant to the Proposed Agreement will remain one of Citizens' lowest cost supply resources. (Id. at 5-8)

On redirect examination at the hearing, Mr. Dillard explained why Citizens chose to negotiate an annual minimum supply obligation as opposed to monthly minimum supply obligations.

(3) Pricing Features of the Proposed Agreement. Mr. Dillard discussed in detail the pricing established in the Proposed Agreement. Mr. Dillard testified that under the Proposed Agreement, Citizens will make a Monthly Steam Payment to Covanta, which will include the following components: Base Steam Payment, Summer Steam Payment, Secondary Steam Payment, Demand Charge, O&M Charge, Force Majeure Charge and a charge for Incremental Chemical Costs. The Proposed Agreement also contains provisions for truing up payments under certain circumstances. (*Id.* at 8-9)

Mr. Dillard stated that the Base Steam Payment is the sum of three separate components multiplied by the amount of steam purchased during the month: (1) the Base Rate initially set to \$0.305/therm; (2) the Winter Incentive Premium initially set to \$0.10/therm; and (3) the Force Majeure Charge provided for in Article XIII of the Proposed Agreement. Both the Base Rate and the Winter Incentive Premium are subject to adjustment in accordance with Exhibit A of the Proposed Agreement. (Id. at 9)

Mr. Dillard explained that the Winter Incentive Premium will be applicable during the months of December through February. The amount of the Winter Incentive Premium is subject to a downward adjustment if output from the IRRF is not available at least 85% of the time during those months. In the event the IRRF's output is available

less than 70% of the time during those months, no Winter Incentive Premium will be paid. (Id. at 9-10)

Mr. Dillard testified that the Summer Steam Payment is applicable to steam produced by the IRRF that exceeds the amount of steam Citizens distributes to the public and is used to produce chilled water or another warm weather application during the months of April through October. The rate for Summer Steam is initially set to \$0.20/therm and is subject to escalation by a factor reflecting the cost of electricity used to produce chilled water. (*Id.* at 10)

Mr. Dillard stated that the Secondary Steam Payment relates to output from the IRRF purchased by Citizens, other than Base Steam and Summer Steam, which is used by Citizens to generate electricity at the Perry K Plant. Costs incurred for the Secondary Steam Payment are not recovered through the FAC Rider. (*Id.* at 10-11)

Mr. Dillard next discussed the Demand Charge, O&M Charge and charges for Incremental Chemical Costs. The Demand Charge equals \$133,330 per month and will not escalate during the 20-year term of the Proposed Agreement. The Demand Charge is subject to reduction in the event Covanta fails to meet its requirement to produce and make available for sale 29,000,000 therms of steam annually. In that event, Citizens will receive a rebate of the Demand Charge equal to the amount of the shortfall multiplied by \$0.055/therm. The O&M Charge is initially set to \$83,333 per month and subject to an escalator formula to reflect increases in labor costs. The charge for Incremental Chemical Costs will only become applicable if Covanta proposes a chemical change that is unacceptable to Citizens, and Citizens proposes an alternative. If Covanta accepts an alternative proposed by Citizens, Citizens only will be responsible for the difference between the cost incurred as a result of Citizens' alternative proposal and the costs that would have been incurred under Covanta's proposal. (*Id.* at 11-12)

Finally, Mr. Dillard described the Force Majeure Surcharge established in the Proposed Agreement. Basically, the Force Majeure Surcharge is a per therm charge that, if it ever becomes applicable, will allow Covanta to recover a portion of capital and operating costs incurred as a result of changes in law. The first \$1 million of any capital costs necessitated by a change in law are borne by Covanta and the total remaining costs (capital and operating) to be included in a Force Majeure Surcharge will be amortized over ten years, with interest. However, the total costs imposed on Citizens under a Force Majeure Surcharge cannot exceed the total amount payable by Citizens to Covanta during the year immediately preceding the year in which the change in law necessitating the Force Majeure Surcharge occurred. Moreover, if Citizens disagrees with the appropriateness of a Force Majeure Surcharge proposed by Covanta, it may terminate the Proposed Agreement upon providing Covanta 30 months' prior written notice and, if applicable, making a lump sum payment to reimburse Covanta for certain capital costs incurred or committed to prior to such notice of termination. (Id. at 12; Pet. Exh. A-2 at 18)

Mr. Dillard then discussed the pricing differences between the Existing Agreement and the Proposed Agreement that he considers most significant. Mr. Dillard opined that the most significant pricing differences between the two agreements are:

- <u>Base steam price adjustment</u>: The mechanism used to adjust the Base Steam Rate is significantly different than the corresponding mechanism in the Existing Agreement and is intended to mitigate the volatility of energy prices.²
- <u>Demand charge</u>: A Demand Charge was added to the Proposed Agreement, which, among other things, will provide Covanta a steady level of funds to use to maintain the steam line used to deliver steam from the IRRF and other IRRF facilities. As noted above, Mr. Dillard explained that Covanta is obligated to refund a portion or all of the Demand Charge if it fails to maintain certain availability targets.
- <u>Summer Steam price adjustment</u>: The index used to adjust the Summer Steam charge also is changed in the Proposed Agreement and is intended to maintain consistency between the cost of steam energy and the energy alternative for chilled water producers that purchase Summer Steam.
- <u>Winter Incentive Premium</u>: The Winter Incentive Premium was added to encourage Covanta to schedule outages outside of and develop alternative sources of trash during the winter heating season.

In sum, Mr. Dillard explained that the Proposed Agreement's pricing, like its other provisions, was the product of arms length negotiations between two unaffiliated parties, based on the Indianapolis energy market in late 2004 and early 2005. He stated that Citizens evaluated all of the charges that Covanta proposed for inclusion in the Proposed Agreement and agreed only to those charges that Citizens considered reasonable. Mr. Dillard emphasized that the various charges set forth in the Proposed Agreement were not negotiated in isolation from each other. For example, attempts to lower or eliminate one charge had to be balanced against Covanta's counter proposals to raise other charges. Citizens attempted to obtain an optimal package of charges and assessed the total cost of the package against the costs it would incur if it pursued alternative sources of steam supply. (Id. at 13-15)

(4) Alternative Steam Supply Resources. Mr. Dillard then discussed the alternatives to purchasing steam from Covanta that Citizens considered. He testified that Citizens considered several alternatives with the simplest, and most likely, being an increased utilization of existing boilers at the Perry K plant. Mr. Dillard stated that although the Perry K plant has adequate capacity to supply Citizens' steam requirement, the existing boilers that would replace steam purchases from Covanta would not burn the lowest cost fuels used to produce steam at the plant, which are coke oven gas and coal. Instead, if Citizens were to replace steam purchases from Covanta with additional output from the Perry K plant's existing boilers, additional natural gas would have to be burned,

² Petitioner's witness Mr. Craig A. Jones testified that a large increase in the weighted average cost of coal in the month of August 2005 resulted in a large increase in costs incurred in September 2005 for steam purchased from Covanta. He stated that the Proposed Agreement's adjustment mechanism would have mitigated the effect of that increase. (Pet. Exh. C at 11-12)

which would cost significantly more than purchasing steam from Covanta under the Proposed Agreement. Citizens also evaluated other options, including the installation of a circulating fluidized bed boiler, converting one of the gas-fired boilers to a coal-fired boiler and coal gasification. Citizens concluded that based on the capital costs, permitting requirements and other considerations associated with any of the other options it evaluated, the Proposed Agreement clearly is the least cost option. (*Id.* at 17-18)

C. Rate Impacts of Proposed Agreement. Mr. Craig A. Jones, Citizens' Manager – Rates and Regulatory Affairs, testified regarding the customer bill impact of the Proposed Agreement as well as the potential impact to customers if Covanta stopped supplying steam to Citizens.

Mr. Jones presented an analysis that quantifies the difference in the pricing provisions of the Existing Agreement and the pricing established in the Proposed Agreement. His analysis involved utilizing the same data submitted in Citizens' most recent FAC filing, with the exception that the Covanta prices were changed to reflect those in the Proposed Agreement. To conduct his analysis, Mr. Jones used the methodology approved by the Commission in Cause No. 41969 – FAC05. Based on Mr. Jones's analysis, the Proposed Agreement would result in an approximately \$3.0 million increase of costs to be recovered through the FAC Rider. Mr. Jones estimated that the FAC rate would be \$0.04687 per therm higher than the per therm FAC rate Citizens proposed in its most recent FAC filing. This would result in an estimated increase of 3.48% and 5.35% for Rate 1 and Rate 2 customer bills, respectively. (Pet. Exh. C at 3-5)

Mr. Jones explained that there are three rates reflected in Citizens' steam tariff, with one additional customer being served under a customer-specific contract. Rate 1 is for small retail customers and Rate 2 is for large retail customers. The FAC rider is applicable to both Rate 1 and Rate 2. Rate 3 is further divided into Rate 3A and Rate 3B. Mr. Jones explained that during the summer months the IRRF generally produces more steam than Citizens needs. Rate 3A was created to allow customers who could make use of that excess steam to purchase it at a reduced rate. The costs of that steam are charged directly to those customers and, therefore, the FAC Rider is not applicable to Rate 3A. Rate 3B applies to those same customers in the event the steam available for sale under Rate 3A is not sufficient to meet their steam needs. Since steam provided under Rate 3B is produced at the Perry K plant, the FAC Rider is applicable to Rate 3B. Mr. Jones also stated that Citizens serves one customer under a customer-specific contract. Because this customer's contract rate is adjusted by the FAC factor, Mr. Jones included it in the analysis of the difference between the Existing Agreement and Proposed Agreement described above. (Id. at 5-7)

Mr. Jones next discussed the impact on customer bills if Covanta stopped supplying steam to Citizens. Consistent with Mr. Dillard's testimony regarding alternatives to steam purchases from Covanta, Mr. Jones's analysis in this regard was based on replacing the steam purchased from Covanta with an increase in the amount of steam produced at the Perry K plant using natural gas as a fuel source. Mr. Jones again based his analysis of replacing steam purchases from Covanta with natural gas on the

data submitted in Citizens' most recent FAC filing. Based on Mr. Jones's analysis, replacing steam purchases from Covanta with natural gas would result in an FAC rate that is \$0.46359 per therm higher than the per therm FAC rate Citizens proposed in its most recent FAC filing. This would result in an estimated increase of 34.63% and 53.17% for Rate 1 and Rate 2 customer bills, respectively. (*Id.* at 8-11)

4. <u>Large Volume Customers' Case-in-Chief Testimony.</u> Mr. Nicholas Phillips, Jr. testified on behalf of the Large Volume Customers. Mr. Phillips had a number of concerns about the Proposed Agreement.

Mr. Phillips stated that Citizens has sufficient capacity to supply steam from coal and coke oven gas during many months of the year. (IG Ex. NP 1 at 6) He testified that during the winter period, however, Citizens operates most efficiently by purchasing steam to minimize its peak load generation requirements that use natural gas as a fuel source. (Id.) He testified that Citizens and ratepayers would be best served by having requirements for steam that obligate Covanta to supply minimum amounts during the winter period of November through March. Mr. Phillips stated that under the Proposed Agreement, Covanta can choose to provide virtually its entire annual obligation during the non-crucial months of the year. (Id.)

Mr. Phillips testified that the Proposed Agreement obligated Citizens to an annual take-or-pay provision, without a requirement for Covanta to supply minimum amounts of steam during the crucial winter period. (*Id.*) He stated that with a take-or-pay obligation, Citizens should require more safeguards and require the take-or-pay obligation be in accord with its needs, which are for purchased steam during the winter period. (*Id.* at 5) Mr. Phillips testified that Citizens' current contract requires Covanta to provide a certain quantity of steam during the months of November through March. (*Id.* at 5-6) He testified that the Proposed Agreement has no such explicit minimum winter obligations. (*Id.* at 6) Mr. Phillips stated that the introduction of a take-or-pay obligation likely caused Citizens to minimize the obligation to take steam. (*Id.*)

Mr. Phillips testified that the Winter Incentive Premium provides Covanta with an incentive to provide therms during winter months but not an obligation to provide steam during the crucial winter period. (*Id.* at 7) He stated that Citizens must pay a premium to Covanta for all usage during the winter period and Covanta may be obligated to refund all or part of the premium after application of the availability formula. Mr. Phillips had concerns regarding the incentive mechanism. He stated there is no explicit example showing a tested capacity rating of the units used to calculate the availability factor. He further testified that the Proposed Agreement provides that the formula can be adjusted due to the unavailability of waste-to-fuel to the Covanta facility as well as other reasons. In other words, Mr. Phillips testified that the availability factor could be adjusted to provide an incentive payment even if the availability criteria are not met by Covanta. (*Id.*)

Mr. Phillips testified that a more direct way to ensure winter deliverability would be to establish a winter minimum requirement with an incentive payment for amounts above that requirement. (*Id.* at 8) He testified that if a take-or-pay obligation is part of the Proposed Agreement, it is crucial that a requirement be established for the steam to be provided during the winter months with minimum obligations for those months. (Id.)

Mr. Phillips testified that take-or-pay obligations can lead to problems associated with payments without delivery of the product. He stated paying a demand payment in exchange for having the ability to dispatch a certain amount of reserved capacity was a better mechanism. Under the Proposed Agreement, however, Mr. Phillips stated Citizens would make a demand payment and also would have an annual take-or-pay obligation, but would receive no firm commitment on the volumes of steam it requires to displace natural gas during the winter period. Mr. Phillips testified that the proposed take-or-pay provision imposes a business risk for contracting for too much purchased steam. He testified that this risk must be balanced against the risk to ratepayers of not having adequate purchased steam in the winter period causing the production of steam with natural gas. He testified that the risk to ratepayers should not be subordinate to the business risk imposed by the proposed take-or-pay obligation in the Proposed Agreement. (Id.)

Mr. Phillips testified that the Proposed Agreement contains escalators for the price of Base Steam, the Winter Incentive Premium and the O&M charge. (Id. at 9) He testified that the escalator provisions have a base point of February, 2005, and escalate after that date. Mr. Phillips observed that the definition for the Base/Winter rate escalator indicates that the escalator can only increase. (Id.) He further testified that if the example on Exhibit A controls instead of the Proposed Agreement's definition, that the escalator can only decrease 5% from the previous year. (Id. at 10) Mr. Phillips also noted that Citizens had failed to provide a calculation of how the escalators would have adjusted the price since February 2005. (Id.) Mr. Phillips was also concerned that the escalation factors in the Proposed Agreement could keep the price of purchased steam at high levels, even if coal prices decrease. In this situation, Mr. Phillips testified Citizens could be faced with purchasing steam at a higher price rather than operating its system on a least cost dispatch basis. (Id.)

Mr. Phillips testified that Citizens' estimates of the costs of the Proposed Agreement had changed significantly between its 30-day filing and its testimony in this proceeding. (*Id.* at 11) Mr. Phillips testified that Citizens' 30-day filing indicated that the FAC would be increased by 8.495 cents per therm as a result of the Proposed Agreement's costs; whereas in testimony in this case, Citizens projected the increase would be 4.687 cents per therm. Mr. Phillips found it troubling that Citizens had been unable to provide a clear cost estimate of the expected cost increases and that it had failed to provide any calculation of the expected increases as a result of the escalators. (*Id.*)

Mr. Phillips then addressed Mr. Jones' example of displacing the entire Covanta steam purchases by natural gas. (*Id.* at 12) Mr. Phillips testified that Citizens should be using coal as a replacement cost instead of natural gas. Mr. Phillips testified that because Covanta has no explicit obligation to provide steam in the winter, Mr. Jones' testimony illustrates a scenario which could occur even if the Commission were to approve the Proposed Agreement. Because the Proposed Agreement has a thirty month termination provision, Mr. Phillips testified that Citizens should have a plan in place to produce steam

on an economic basis if Covanta exercises its option to terminate the contract. (*Id.* at 12-13) He also stated that currently Citizens has indicated that it has no plan developed to replace purchased steam from Covanta. (*Id.* at 13)

Mr. Phillips testified that he also had concerns regarding the Force Majeure Surcharge and Change in Law provisions in the Proposed Agreement. He stated that Change in Law is broadly defined and that Covanta may charge Citizens its aggregate capital costs over one million dollars and any operating cost increases associated with any Change in Law. He testified that the Force Majeure Surcharge assumes that Covanta borrows all of its estimated Change in Law costs on day one and applies an undefined rate of interest to them. (Id.)

Mr. Phillips testified that the Change in Law provisions in the Proposed Agreement were at odds with sound ratemaking principles. Mr. Phillips testified that steam ratepayers should not be obligated to pay for changes in laws concerning trash handling, trash storage, or other items that have to do with the responsibilities of Covanta. (Id. at 13-14) He also testified that surcharges should not be based on estimates but actual expenses from a plan that requires an approval from an agency such as the Commission. (Id. at 14) Mr. Phillips concluded that the Proposed Agreement shifts the risks of the waste-to-steam operation to ratepayers and subjects ratepayers to surcharges based on estimates of compliance. He also testified that the recovery mechanism should not be based on the assumption that Covanta borrows all of the capital and increased operating costs it will incur over a twenty year term on day one and that an undefined interest rate should not be applied to this imaginary loan. He stated that the recovery mechanism should not be more favorable than the standard regulated utilities have to follow under Indiana law, which at least require the Commission to find substantial documentation that the expected costs and that schedule for incurring those costs are reasonable and necessary. (Id.)

Mr. Phillips testified that the Agreement is also contingent on Covanta reaching an agreement with the City of Indianapolis, which is not in place. (*Id.* at 2) He testified that if early approval of the contract by the IURC provides benefits to Covanta, those benefits should be considered by the Commission in a review of the Proposed Agreement. (*Id.*)

Mr. Phillips testified that many of the costs related to charges to be imposed under the Proposed Agreement are not appropriate for recovery through an FAC rider. (*Id.* at 14) Mr. Phillips stated that cost related to demand charges, O&M charges, Changes in Law, or take or pay charges are more suitable for recovery in base rates after Commission investigation, deliberation and approval. (*Id.*)

Mr. Phillips recommended that the Proposed Agreement not be approved unless the problems enumerated in his testimony were resolved, including: (1) the take or pay provision and implications involving operating in a least cost manner; (2) lack of winter supply obligations; (3) poorly designed winter incentive mechanism; (4) one-way escalators; (5) pass-through of Change in Law costs in a manner that is at odds with

sound ratemaking principles; (6) Covanta's option not to enter into the contract unless it reaches an agreement with the City of Indianapolis. (*Id.* at 15) Mr. Phillips further recommended that Citizens should not be allowed to include charges in the FAC that are normally a part of base rates. (*Id.*) In the alternative, if the Proposed Agreement is approved without resolving these issues, Mr. Phillips recommended that the Commission not provide for the recovery of costs in Citizens' FAC. (*Id.* at 16) Mr. Phillips' final recommendation was that the Commission require that Citizens develop a viable alternative plan to replace the steam supply from Covanta. (*Id.*)

5. <u>OUCC's Case-in-Chief Testimony</u>. Ms. Joan M. Soller, Director of the OUCC's Electric Division, testified on behalf of the OUCC.

Ms. Soller stated that the OUCC believes that cost-effective, nonsubsidized renewable energy sources, such as the IRRF, favorably enhance the environment and indicate responsible stewardship. She further stated that the OUCC believes that long-term contracts can be an effective way to mitigate risks due to price and supply volatility if risks are equitably shared between buyers and sellers. However, Ms. Soller opined that the price adjustment mechanisms and force majeure provision in the Proposed Agreement unduly expose Citizens and its ratepayers to potentially volatile increasing costs. She also expressed her belief that many of the costs to be incurred under the Proposed Agreement should more appropriately be recovered in base rates. She recommended that a review to separate costs to be recovered in base rates from those to be recovered through the FAC Rider and to determine cost allocations should occur before the Proposed Agreement is implemented in 2008. (Public's Exh. 1 at 3-4)

In response to questions from the Presiding Officers at the hearing, Ms. Soller clarified her ultimate recommendation regarding approval of the Proposed Agreement, stating, "Given the testimony that was presented today by Mr. Tracy, if the OUCC is able to review the costs with subsequent FACs, then, I believe the contract should be approved." (Tr. at A-97, lines 14-17) She reiterated the OUCC's position that certain costs to be incurred under the Proposed Agreement should be recovered through base rates. (Id. at A-98, lines 1-2)

Ms. Soller also testified regarding Citizens' long-range planning. She suggested that Citizens complete an Integrated Resource Plan ("IRP") similar to those used by electric utilities pursuant to the Commission's rules governing IRPs. (Public's Exh. 1 at 5).

6. <u>Petitioner's Rebuttal Testimony</u>. In its rebuttal testimony, Citizens responded to Mr. Phillips's criticisms of the Proposed Agreement. Citizens' rebuttal testimony also addressed the Large Volume Customers' and the OUCC's suggestions regarding resource planning. Mr. Jones's rebuttal testimony addressed issues raised by the Large Volume Customers regarding the comparisons presented in his case-in-chief testimony quantifying the projected impact of the Proposed Agreement. Mr. Jones also responded to the Large Volume Customers' and OUCC's suggestion that certain charges

imposed under the Proposed Agreement should not be recovered through Citizens' FAC Rider.

Mr. Tracy first responded to Mr. Phillips's recommendation that the Proposed Agreement not be approved until the "significant problems" enumerated in his testimony are resolved. Mr. Tracy rejected Mr. Phillips's recommendation that the Proposed Agreement be disapproved because, in Mr. Tracy's opinion, the Proposed Agreement has no significant problems. Rather, Mr. Tracy testified that Mr. Phillips had simply substituted his judgment for the judgment exercised by the Citizens employees who were involved in the arms-length negotiations that led to the Proposed Agreement. (Pet. Exh. F at 2)

Mr. Tracy emphasized that during the negotiations with Covanta, Citizens was represented by a highly competent team of employees and attorneys. He stated that the Citizens employees principally involved in the negotiation have approximately 100 years of combined experience in the steam utility business and were supported by other employees with another 45 years of combined experience. Mr. Tracy pointed out that Mr. Dillard has been involved in managing the steam business's relationship with Covanta since its inception in 1986 and that Mr. Tracy himself has had overall responsibility for that relationship since 1998. (*Id.* at 2-3)

Mr. Tracy testified that the negotiation of the Proposed Agreement was a very lengthy negotiation between two unaffiliated commercial entities. He stated that at times the negotiations were very tense and, at one point, broke down completely. In the end, Mr. Tracy reiterated his belief that Citizens was successful in achieving its objectives, which were focused on price, reliability, quality and optimizing Citizens' utilization of the Covanta steam supply to meet its customers' needs at the lowest cost reasonably possible. (*Id.* at 3)

Mr. Tracy cited Mr. Phillips's criticism of the minimum annual supply and purchase obligation the parties negotiated as an example of Mr. Phillips's substituting his judgment for that of the employees who negotiated on behalf of Citizens. Mr. Tracy pointed out that Mr. Phillips stated in his testimony that he is "not in favor of take-or-pay obligations"; demonstrating a personal bias against the manner in which Citizens chose to address that issue. Mr. Tracy also disagreed with Mr. Phillips's opinion that Citizens should have agreed to minimum monthly purchase obligations during certain months. Mr. Tracy testified that, in Citizens' judgment, agreeing to minimum monthly purchase obligations as suggested by Mr. Phillips would not be in the best interests of Citizens' customers because it would be more likely to lead to a requirement to purchase more steam in a given month than Citizens may need. Instead, during the negotiations, Citizens chose to negotiate for flexibility regarding how its annual purchase obligation will be utilized throughout the year based on is operational needs and the weather-sensitive needs of its customers. (*Id.* at 6)

Mr. Tracy further testified that he does not believe a renegotiation of the aspects of the Proposed Agreement criticized by Mr. Phillips would result in a more favorable

agreement to Citizens and its customers. That is true, according to Mr. Tracy, because Citizens does not agree that all of the changes proposed by Mr. Phillips would benefit Citizens and its customers. As an example, Mr. Tracy noted his disagreement that the minimum monthly purchase requirements suggested by Mr. Phillips would be in the best interests of Citizens and its customers. (*Id.* at 4)

Moreover, Mr. Tracy explained that he does not believe Covanta will be willing to make any changes it perceives as significant concessions without insisting on equally significant corresponding changes that it perceives as favorable to Covanta, including the very favorable prices Citizens was able to negotiate. Mr. Tracy opined that Mr. Phillips did not appear to appreciate the fact that the various aspects of the Proposed Agreement were not negotiated in isolation from one another and that Covanta will evaluate the effect any proposed changes will have on the overall economics of the Proposed Agreement, as written. (*Id.*)

Mr. Tracy expressed his concern that if the Proposed Agreement is disapproved, that Covanta may terminate it and convert the IRRF to an electric generating plant used to produce electricity to be sold in the Midwest ISO's wholesale electricity markets. He testified that if that happened, Citizens and its steam customers will lose a very economic and reliable source of steam. Mr. Tracy explained that the vast majority of Covanta's waste to energy facilities in other states generate electricity and that he is convinced that Covanta has the capability and expertise to convert the IRRF to an electric plant if it concludes a steam supply agreement on acceptable terms is not possible. (*Id.* at 5) During cross examination of Mr. Tracy, the OUCC introduced into evidence a letter Covanta sent Citizens in June 2006 that states:

As you know, we have always maintained the position that if we can not reach a steam sale agreement, our alternative use of the steam would be to sell power into the MISO market. Since our initial assessment of the local power market and the development of the associated economic analysis for the electricity sale option, our estimated MISO rates have changed from \$36/MWh to a current estimated assessment of \$50 to \$60/MWh.

(Public CX Exh. CX-1)

Mr. Tracy also addressed the concerns raised by Mr. Phillips regarding the Proposed Agreement's condition precedent requiring Covanta to negotiate an acceptable service agreement with the City of Indianapolis. In his initial rebuttal testimony, Mr. Tracy stated that he was not concerned about Covanta's ability to satisfy that condition. In his supplemental rebuttal testimony, Mr. Tracy testified that, in fact, Covanta sent Citizens a letter stating that the Proposed Agreement's condition precedent regarding Covanta's agreement with the City will be deleted in its entirety upon Commission approval of the Proposed Agreement. Thus, upon Commission approval, the Proposed Agreement will be effective with a term commencing on December 1, 2008. (Pet. Exh. I at 2; Pet. Exh. I-1)

In response to Mr. Phillips's criticism of the annual 29 million therm purchase and sale obligation Citizens and Covanta negotiated, Mr. Dillard testified that the obligation is reciprocal. He reiterated that if Covanta fails to satisfy its annual delivery obligation, it will have to refund a portion of the Demand Charge that Citizens has paid for that year. Mr. Dillard also pointed out that the 29 million therm minimum obligation is well below the annual amount Citizens has historically purchased from Covanta. Mr. Dillard testified that for the last five years, Citizens has purchased an annual average of 42 million therms of steam, 32 million of which would qualify as Base Steam under the Proposed Agreement. Thus, Citizens' minimum purchase requirement under the Proposed Agreement is approximately 90% of its average annual purchases of Base Steam during the past five years. (Pet. Exh. G at 3)

Mr. Dillard also took issue with Mr. Phillips's criticism of Citizens' decision to avoid monthly minimum purchase requirements, agreeing with Mr. Tracy that such monthly minimums were not in Citizens' or its customers' best interest. Mr. Dillard testified that Citizens could not have insisted that Covanta agree to a minimum supply obligation without itself agreeing to a minimum monthly purchase requirement. Based on its judgment and experience with Covanta, Citizens did not consider it advisable to agree to minimum monthly purchases. Rather, Mr. Dillard stated that Citizens considered it more important, and had as a major goal in its negotiation with Covanta, to maintain flexibility regarding its utilization of its annual steam purchases from Covanta. Mr. Dillard emphasized the importance of that flexibility, explaining that a minimum monthly purchase obligation would diminish Citizens' ability to match its purchases with its weather-sensitive load and increase the risk of purchasing steam it does not need. (Id. at 4)

Mr. Dillard also disagreed with Mr. Phillips's testimony that without a minimum monthly supply obligation during the winter period, Covanta may satisfy its 29 million therm annual supply obligation without delivering steam in the winter months. Mr. Dillard testified that during his eighteen years of experience in dealing with Covanta and its predecessor, neither has attempted to limit steam deliveries to the warmer months of the year. Mr. Dillard presented testimony that showed that Covanta's deliveries during the winter months have been substantial, approximately 40% of the total annual volumes of steam delivered from the years 2001 to 2005. Furthermore, Mr. Dillard stated, the Winter Incentive Premium established in the Proposed Agreement gives Covanta a significant incentive to increase steam deliveries during the winter months. (*Id.* at 6)

Mr. Dillard next took issue with Mr. Phillips's criticisms of the Winter Incentive Premium negotiated by Citizens and Covanta. Mr. Dillard first pointed out that there is no need for the Proposed Agreement to provide an example showing the tested capacity rating of the Covanta units used to calculate the Winter Incentive Premium, as suggested by Mr. Phillips. This is because the availability factor is based on the amount of time the Covanta units are available for use, not their output capacity. Mr. Dillard also disagreed with Mr. Phillips's objection to the fact that the availability factor used to determine whether Covanta must refund a portion of the Demand Charge can be adjusted when circumstances beyond Covanta's control have affected its ability to supply steam. Mr.

Dillard testified that Citizens found it reasonable and consistent with the concept of the Winter Incentive Premium to provide Covanta relief when circumstances beyond its control have affected the IRRF's availability. Additionally, Mr. Dillard pointed out that such adjustments, the likelihood of which Mr. Dillard believes are remote, cannot be made without Citizens' involvement. (*Id.* at 7)

Mr. Dillard then addressed Mr. Phillips's conclusion that the Demand Charge Citizens and Covanta negotiated is unreasonable. Mr. Dillard first pointed out that the Demand Charge, which is \$1.6 million per year, will not increase during the 20-year term of the Proposed Agreement. Mr. Dillard explained that, during its negotiation with Covanta, Citizens initially argued against inclusion of the Demand Charge in the Proposed Agreement, but that Covanta would only agree to eliminate it if Citizens agreed to a substantial increase to the Base Rate. Based on its expected purchases of more than 29 million therms annually, Citizens concluded that a substantial increase to the volumetric Base Rate charge would have caused it to incur more than the annual \$1.6 million Demand Charge. Finally, Mr. Dillard pointed out that, contrary to Mr. Phillips's testimony, there are performance requirements associated with the Demand Charge and that if Covanta fails to meet its annual supply obligation, it must refund a portion of the Demand Charge paid by Citizens. (*Id.* at 8-9)

Mr. Dillard also disagreed with Mr. Phillips's testimony regarding the price adjustment mechanism that Citizens and Covanta negotiated. First, he testified that contrary to Mr. Phillips's testimony, adjustments to the Base Rate and Winter Incentive Premium can be reduced as well as increased based on the formula set forth in Exhibit A of the Proposed Agreement. (*Id.* at 9-10). At the hearing, Mr. Tracy stated that Covanta had confirmed its agreement with Citizens' interpretation of the price adjustment mechanisms, and that the Base Rate and Winter Incentive Premium can be reduced by as much as five percent annually. (Tr. at A-26, lines 23-26, A-27, lines 1-8)

Mr. Dillard also addressed Mr. Phillips's concerns regarding the time period used to establish the baseline costs that the price adjustment mechanisms will be applied to. He explained that the February and March 2005 time period was a compromise between the parties reflecting the fact that energy costs were steadily rising during the time period the Proposed Agreement was being negotiated. Finally, Mr. Dillard responded to Mr. Phillips's concern that the prices Citizens will pay when the Proposed Agreement becomes effective are not "explicitly" known. Mr. Dillard explained that rather than speculating about what price would be reasonable three years into the future, Citizens and Covanta instead agreed to a baseline price that would be adjusted throughout the Proposed Agreement's twenty-year term. In Mr. Dillard's view, that aspect of the Proposed Agreement is no different than any long-term supply arrangement where the prices to be charged in the future are not "explicitly" known. Mr. Dillard did provide an exhibit showing the possible cost of steam under the Proposed Agreement during 2009, the first full year that the Proposed Agreement will be in effect, assuming a hypothetical price escalation of three percent annually. (Pet. Exh. G at 10 – 11; Pet. Exh. G-3)

Mr. Dillard also took issue with Mr. Phillips's testimony regarding the Proposed Agreement's change in law provisions. He disagreed that changes in law affecting the processing of the fuel (i.e., trash) Covanta uses to produce steam cannot legitimately be reflected in the price Citizens pays for steam. Furthermore, Mr. Dillard explained that Covanta will be responsible for the first \$1 million of costs incurred to comply with any change in law and that Citizens' maximum aggregate exposure to any change in law costs is the total amounts paid by Citizens under the Proposed Agreement during the year proceeding the year in which the change in law occurred. Mr. Dillard also testified that Citizens' exposure to any change in law costs is further limited by its ability to terminate the Proposed Agreement with 30 months prior written notice. He also addressed Mr. Phillips's concern regarding the use of estimates to determine the charges Citizens will incur as the result of a change in law, stating that the Proposed Agreement provides for a true up mechanism. (Pet. Exh. G at 13-15)

Citizens also presented rebuttal testimony in response to the Large Volume Customers' and OUCC's testimony suggesting that Citizens' resource planning is inadequate.

Mr. Tracy opined that Mr. Phillips's and the OUCC's recommendations regarding resource planning are beyond the scope of this proceeding. Nevertheless, Mr. Tracy addressed the Large Volume Customers' and OUCC's testimony regarding resource planning. Mr. Tracy testified that Citizens has conducted analysis in consideration of several alternatives to the IRRF and that any analysis beyond that already completed would be premature at this point. Mr. Tracy did state that Citizens would be willing to discuss its long-term resource plan with the OUCC and Large Volume Customers and incorporate suggested improvements into its planning process. (Pet. Exh. F at 6-10)

Mr. Dillard responded in more detail to the Large Volume Customers' and the OUCC's testimony regarding resource planning. Mr. Dillard described the various alternatives to steam purchases that Citizens has considered and agreed with Mr. Tracy that it would be premature to plan for pursuing one of those options while Citizens expects to continue steam purchases from Covanta. (*Id.* at 16) Mr. Dillard also took issue with Ms. Soller's recommendation that Citizens complete every five years an Integrated Resource Plan similar to the IRPs filed by electric utilities. He testified that requiring Citizens to complete an IRP similar to electric utilities would be unnecessary, costly and potentially wasteful. (*Id.* at 18-19)

Mr. Jones responded to issues raised in Mr. Phillips's testimony regarding the comparisons presented in Mr. Jones's case-in-chief testimony to quantify the projected impact of the Proposed Agreement. He also discussed why it is appropriate for Citizens to recover through its FAC Rider costs related to the Demand Charge and O&M Charge.

Mr. Jones first explained the differences between the projections Citizens provided in its original 30-day filing requesting approval of the Proposed Agreement and the analysis presented in Mr. Jones's case-in-chief testimony. Mr. Jones stated that the first and most obvious difference is the different time periods and assumptions upon

which the different projections are based. The primary difference relates to the use of data from Citizens' FAC05 filing for the first projection and the use of data from Citizens' FAC06 filing for the projection shown in Mr. Jones's case-in-chief testimony. Mr. Jones then explained other differences between the two projections, concluding that the projections presented in his case-in-chief testimony are correct and reasonable. (Pet. Exh. H at 1, 2-4)

Citizens also took issue with Mr. Phillips's and Ms. Soller's contentions that certain charges that will be imposed under the Proposed Agreement should not be recovered through the FAC Rider. Mr. Jones emphasized that all costs incurred to purchase steam from Covanta that is supplied to Citizens' Rate 1, Rate 2 and Rate 3B customers currently are recovered through the FAC Rider. Mr. Jones testified that, in his view, simply because certain costs have been categorized differently or renamed in the Proposed Agreement is not a reason to now exclude them from recovery under the FAC Rider. Indeed, Mr. Jones pointed out, such a result would be contrary to the FAC Rider, which provides that the "average cost of purchases from the Indianapolis Resource Recovery Project of displaced net steam to mains" (without excluding any particular charge or category of costs) will be included in the estimated cost of fuel for a particular FAC period. Mr. Jones stated that costs related to the Demand Charge, O&M Charge and other charges established in the Proposed Agreement are directly attributable to the purchase of steam from Covanta. Mr. Jones further testified that any fuel purchased by a utility has a certain level of O&M (as well as other costs) included in the price. As an example, Mr. Jones testified that demand costs, capacity costs and reservation fees are all considered gas costs that are recoverable through Indiana gas utilities' gas cost adjustment mechanisms.

Mr. Jones also pointed out that the Commission has long allowed the recovery of certain wholesale electricity purchases through electric utilities' fuel cost adjustments, while recognizing that those purchases are priced on a commodity basis with no unbundling of the various components (including O&M) that make up the price. Finally, Mr. Jones explained that the Demand Charge will not increase over the life of the Proposed Agreement. Therefore, if Citizens purchases more than 29 million therms annually (which Citizens expects to do) the Demand Charge will save customers money. Mr. Jones provided an example of this savings based on Citizens' average annual purchases, which showed the proposed annual Demand Charge would be \$764,500 less than the increased cost resulting from applying a volumetric per therm rate designed to spread the \$1.6 million Demand Charge over the 29 million therm minimum obligation. Mr. Jones opined that it would be unfair to exclude the Demand Charge from the FAC Rider when it was negotiated for the very purpose of reducing the amount of costs that would be passed through to customers under that rider. (Id. at 5-7)

7. <u>Discussion and Findings</u>. The Petitioner has requested that the Commission (i) find reasonable and approve a Steam Purchase Agreement between Citizens and Covanta and (ii) authorize Citizens to recover the retail Jurisdictional costs incurred under the Agreement through Petitioner's Standard Contract Rider No. 1, Fuel Cost Adjustment.

A. Reasonableness of Proposed Agreement. The standard by which we review the reasonableness of the Proposed Agreement has been established by the Indiana General Assembly, which has declared, "It is the policy of this state to encourage the development of alternate energy production facilities . . . in order to conserve our finite and expensive energy resources and to provide for their most efficient utilization." Ind. Code § 8-1-2.4-1. Citizens is a "steam utility" and the IRRF is an "alternate energy production facility" within the meaning of Indiana's laws governing steam utility purchases from alternate energy production facilities. See Ind. Code §§ 8-1-2.4-2(f), 8-1-2.4-2(b)

Pursuant to Ind. Code § 8-1-2.4-4(f), a steam utility and the owner of an alternate energy production facility "may enter into a long term contract in accordance with [Ind. Code § 8-1-2.4-4(a)] and may agree to rates for purchase and sale transactions." Under Ind. Code § 8-1-2.4-4(a) the Commission must find that the terms and conditions of such a contract:

- (A) Are just and economically reasonable to the corporation's ratepayers;
- (B) Are nondiscriminatory to alternate energy producers, cogenerators, and small hydro producers; and
 - (C) Will further the policy stated in Ind. Code § 8-1-2.4-1.

Mr. Tracy testified that the IRRF offers an environmentally sound solution to the waste disposal needs of the Indianapolis community and that Citizens' purchases of steam produced at the IRRF furthers the policy of the State to encourage the development of alternate energy production facilities, including waste management and refuse derived facilities. (Pet. Exh. A at 7) No party disputed that testimony or raised any issue that the Proposed Agreement's terms and conditions are discriminatory to other alternate energy producers, cogenerators or small hydro producers. Consequently, we find that the Proposed Agreement satisfies the requirements of Ind. Code § 8-1-2.4-4(a)(1)(B)-(C)

Thus, the remaining determination to be made is whether the Proposed Agreement is "just and economically reasonable" to Citizens' ratepayers within the meaning of Ind. Code § 8-1-2.4-4(a)(1)(A). In making that determination we strive to avoid second-guessing Citizens' negotiating strategy or speculating regarding the myriad possibilities that Citizens and Covanta could have agreed to. See, e.g., Public Serv. Co. of Ind., Inc., 1990 Ind. PUC LEXIS 108, *250 (Cause No. 37414-S2, Apr. 4, 1990) ("we reject [the] invitation to link these agreements together and second guess the terms of the agreements based upon speculation.") Rather, our charge under the statute is to determine whether the agreement that has been presented to us is just and economically reasonable to Citizens' ratepayers.

Ind. Code § 8-1-2.4-4(c) identifies factors to be considered in setting the rates for purchase from a facility such as IRRF. It is therefore informative to consider the

Proposed Agreement in terms of how it might compare to such pricing absent an agreement as Citizens could conceivably have been statutorily required to make purchases under such rates. The evidence shows that if Citizens is no longer able to purchase steam from Covanta it will need to pursue other more costly sources of steam in the short-term and, in the long-term, likely need to make significant capital investments. The general avoided cost basis of rate setting embodied in Ind. Code § 8-1-2.4-4(c) would reflect consideration of such other sources of steam.

The evidence supports that the Proposed Agreement is the result of arms length negotiation between two unaffiliated parties. We take note of Citizens' testimony that the various aspects of the Proposed Agreement were not negotiated in isolation from one another. Similarly, although we discuss individual provisions separately below, we will consider the evidence presented and review the justness and economic reasonableness of the Proposed Agreement as a whole.

There were fundamental disagreements between the Large Volume Customers and Citizens regarding how purchase and supply obligations under the Proposed Agreement should be structured. Large Volume Customer witness Mr. Phillips testified that Citizens should have insisted that Covanta agree to minimum monthly supply obligations for the winter months, which Mr. Phillips defined as November through March. Mr. Dillard explained that Covanta would not have agreed to a minimum monthly supply obligation unless Citizens agreed to a reciprocal purchase obligation. In order to maintain flexibility regarding its use of steam purchased from Covanta, Citizens instead chose to negotiate an annual purchase and supply obligation that would allow it to better match purchases with its weather-sensitive load. We note that the 29 million therm annual supply obligation that Citizens agreed to is well below the annual volume of steam that Covanta has historically delivered to Citizens. With respect to Mr. Phillips's concern that Covanta supply an adequate amount of steam during the winter months, the Proposed Agreement's Winter Incentive Premium is a reasonable approach to addressing that concern. Additionally, both Mr. Dillard and Mr. Tracy stated it would be difficult for Covanta to meet its annual supply obligation if it limited steam deliveries to non-winter months.

The Proposed Agreement contains a Demand Charge to which Mr. Phillips objected. Citizens concluded that a substantial increase to the volumetric Base Rate charge would have caused it to incur annual costs that exceed the annual \$1.6 million Demand Charge, which will not increase during 20-year term of the Proposed Agreement. The constant Demand Charge also serves to levelize a portion of Citizens' payments to Covanta, which provides for the additional benefit of reducing price volatility for Citizens' customers.

The Proposed Agreement's price adjustment mechanisms used to adjust the Base Rate and Winter Incentive Premium is different than the price adjustment mechanism in the existing agreement between Citizens and Covanta. The new mechanism should reduce price volatility by adding other indices, including CPI, to the methodology used to adjust the price of steam. Moreover, we note that the pricing Citizens negotiated is

favorable relative to the prices Covanta's affiliates charge for steam at other facilities. In the June 2006 letter Covanta sent to Citizens, which the OUCC introduced at the hearing, Covanta stated that it "currently sells steam at other Covanta facility locations across the country" and the "typical contractual rates for those facilities ranges between \$9 - \$20/ M-lb." (Public CX Exh. C-X-1) By comparison, based on the various charges initially established in the Proposed Agreement, the overall rate initially set in the Proposed Agreement for steam purchases is \$5.37/M-lb.

Mr. Phillips raised a number of objections to the change in law provision and Citizens' willingness to accept some of the risk that the IRRF's costs could increase as a result of a change in law. The change in law provision appears to provide an illustration of Citizens' efforts to balance the costs and risks of one aspect of the Proposed Agreement against the costs and risks of other aspects of the Proposed Agreement. On redirect examination at the hearing, Mr. Tracy was asked how the base price of steam would have been affected if Citizens had not agreed to bear some of the risk for future changes in law. He answered:

It would be my opinion that the base price would have been higher than it is now. [The change in law provision] was negotiated in the contract because throughout the entire contract, you're constantly trading off risk for price, and that is a risk that Covanta felt was real. They established a very significant price at the beginning of the negotiations. So, my opinion would be that the base price, if didn't have that, would be higher than it is today.

(Tr. at A-62-A-63)

Moreover, as Mr. Dillard testified, Citizens was able to limit its exposure under the change in law provision and still achieve the base price concessions Mr. Tracy discussed. Covanta is responsible for the first \$1 million of costs incurred to comply with any change in law affecting the IRRF. Additionally, Citizens' maximum exposure to costs incurred as a result of a change in law is the total amounts paid by Citizens under the Proposed Agreement during the year preceding the year in which the change in law occurred. Since the change in law costs will be amortized over ten years, Citizens' and its customers' maximum exposure to an increase in the price paid to Covanta as a result of a change in law is a ten percent increase. Also, as Mr. Dillard explained at the hearing, the potential impact to customers is further mitigated because Covanta steam purchases represent less than half of Citizens' steam supply. Finally, Citizens' exposure is further limited by its ability to terminate the Proposed Agreement with 30 months prior written notice.

Mr. Phillips suggested that we consider any benefit that this Commission provides Covanta regarding its negotiation of a contract with the City of Indianapolis. At the hearing, Mr. Tracy testified that Covanta has agreed to waive the condition precedent regarding its negotiation of a contract with the City, upon Commission approval of the Proposed Agreement. Accordingly, our approval of the Proposed Agreement is the only condition precedent to its effectiveness.

Based on the evidence presented and in reviewing the justness and economic reasonableness of the Proposed Agreement as a whole we find that the Proposed Agreement is just and economically reasonable to Citizens' steam customers. Therefore, we find that the Proposed Agreement should be and hereby is approved.

B. Recovery of Costs of the Proposed Agreement. Having found the Proposed Agreement just and economically reasonable to Citizens' ratepayers, we now address Citizens request for cost recovery authorization for costs incurred under the Proposed Agreement from those ratepayers.

In its Petition, Citizens requested authority to recover the retail jurisdictional costs incurred under the Proposed Agreement through its FAC Rider. During cross-examination, Mr. Tracy emphasized that the Proposed Agreement is an extension of the Existing Agreement "under which all of the fuel costs associated with the Covanta contract are recovered under a fuel rider." (Tr. at A-10 lines 14-17) However, the Commission does not agree that the Proposed Agreement is an extension of the Existing Agreement. The Proposed Agreement is a newly negotiated vehicle to secure a steam supply for Citizens. Notwithstanding, the historical treatment of sufficiently similar terms under the Existing Agreement certainly provides experience to inform the decisions we make today.

The Monthly Steam Payment of the Proposed Agreement includes charges identified as Base Steam Payment, Summer Steam Payment, Secondary Steam Payment, Demand Charge, O&M Charge, Force Majeure Surcharge, and Incremental Chemical Costs. The charge amounts are assessed based on various mechanisms within the Proposed Agreement. OUCC witness Ms. Soller testified that "[m]any of these costs do not constitute fuel (e.g. O&M expenses, demand charges, force majeure components) and should be more appropriately recovered in base rates." (Public's Exh. 1 at 4) Citizens' witness Mr. Jones explained, demand costs, capacity costs and reservation fees are all considered gas costs that are recoverable through Indiana gas utilities' gas cost adjustment mechanisms. Additionally, Mr. Jones noted the Commission has long allowed the recovery of certain wholesale electricity purchases through electric utilities' fuel cost adjustments, while recognizing that the prices for those purchases include various cost components, including O&M.

The Commission authorized Citizens in Cause No. 41969-FAC 1 to use the methodology and follow procedures approved by the Commission in connection with the fuel cost adjustments requested in the past by the prior owner of the steam plant, Indianapolis Power & Light Company. We consider Citizens' steam supply fuel cost recovery request herein such that authorized treatment would be consistent with that reasonably afforded an electric generating utility for its fuel cost, therefore our treatment of the cost of fuel included in the cost of wholesale purchases of electricity is instructive.

The Commission specifically addressed the cost of fuel included in the cost of purchased electricity to be included in cost of fuel proceedings in Cause No. 33735-S1 [March 24, 1976]:

We find, therefore, that the only costs that should be included in the FAC are those costs allowed by Accounts 151 and 518 for generated and purchased power with identifiable fuel costs of the USOA, and the net energy costs of purchased power without identifiable Accounts 151 and 518 cost. [pg.9]

A distinction was established between purchased power contracts with a single energy price and those with explicit non-fuel related charges, primarily demand and capacity but also non-fuel operation and maintenance. This distinction exists because of the inherent differences between the products; one has value as an energy product while the other has both energy and capacity components. Explicit non-fuel related costs are not ordinarily included in fuel costs in the FAC. The proposition that if implicit non-fuel related costs are contained in energy-only contracts which are included as a cost of fuel, then any explicit non-fuel related costs in purchase power contracts should also be included is contrary to ordinary Commission practice. Notwithstanding, a case-by-case consideration may warrant such non-standard treatment.

A primary characteristic of a cost we authorize herein as a fuel cost recoverable in the FAC is the connection between the charge amount and the product volume supplied. The Base Steam Payment, Summer Steam Payment and Secondary Steam Payment of the Proposed Agreement as described in Article V are each calculated by multiplying some charge rate by an "amount tendered". Conversely, the Proposed Agreement's Demand Charge and the O&M Charge contain no "amount tendered" component. In fact the Demand Charge is a set amount for the term of the Proposed Agreement. The O&M Charge escalates from a base amount based upon changes in the CPI Index and the Labor index. The Incremental Chemical Costs as described in Article XII(B) of the Proposed Agreement are based on the "monthly costs" of agreed to chemical changes. The amount of chemicals and therefore the related charge amount will likely change with the product amount tendered. Additionally, we recognize the chemical treatment required to maintain the quality of the steam energy product creates distinction from our electricity energy product comparison. The above charges differentiated by the noted primary characteristic provides for distinction among them. We note the Secondary Steam Payment of the Proposed Agreement relates to output from the IRRF purchased by Citizens which is used to generate electricity at the Perry K Plant and not to supply steam to its ratepayers. Citizens did not seek FAC Rider inclusion for this cost.

Upon considering the evidence in this proceeding and the Commission's ordinary treatment of similar costs we find that the retail steam Jurisdictional portion of the Base Steam Payment, Summer Steam Payment and Incremental Chemical Costs as described in Article V of the Proposed Agreement are eligible for recovery through Citizens FAC Rider. This finding does not limit or modify Citizens' requirement to demonstrate in future FAC proceedings that it has made every reasonable effort to acquire fuel and

generate or purchase steam or both so as to provide steam to its retail customers at the lowest fuel cost reasonably possible. The remaining charges of the Proposed Agreement are not eligible for recovery through this mechanism. Furthermore, we find that Citizens should make a compliance filing under this Cause which updates its Standard Contract Rider No.1 to reflect the specific findings herein, namely the language of item A(1)(b).

The Commission notes that Citizens agreed in a settlement agreement approved in Cause No. 41969-FAC03-S1 (January 23, 2004) to file a base rate case no later than January 1, 2007. The anticipated base rate case filing and timing of the implementation of the Proposed Agreement provides an opportunity for Citizens to update its base rates to include costs which are found to be known and measurable.

C. Resource Planning. The Commission recognizes that the steam supply from Covanta is a significant portion of Citizens supply portfolio. The Large Volume Customers and the OUCC testified that Petitioner has not done adequate planning to replace the Covanta steam supply and requested the Commission to order Citizens to conduct such planning. Additionally, the Large Volume Customers recommended that Citizens be required to explain whether it could buy coal at a lower price if it partnered with IPL.

In rebuttal testimony, both Mr. Tracy and Mr. Dillard testified that Citizens has done a sufficient amount of planning to prepare for the possibility of losing Covanta as a steam supplier. Mr. Dillard provided a discussion of the various alternatives to steam purchases that Citizens has considered. In addition, Mr. Dillard addressed coal partnering by testifying that Citizens and IPL did collaborate in connection with coal purchases, but when that arrangement expired in 2005, IPL was not interested in continuing it, despite Citizens interest in doing so. (Pet. Exh. G at 17)

Resource planning is a critical component to the long term financial health of a utility and the goal of lowest reasonable fuel costs for ratepayers. In particular, the fact that Citizens' steam supply relies heavily on a single external source heightens the need for reasonable evaluation of alternatives in long range planning. The specific planning needs of a steam utility differ from that of an electric utility in part because of the supply resources to be considered. The Proposed Agreement contains terms that would allow either party to terminate it with generally 30-months' notice. The aforementioned reliance on Covanta for economical steam supply demands that Citizens be proactive in assessing alternative supply options.

At the hearing, the OUCC introduced into evidence a document listing 11 areas pertaining to a long-term work plan for steam resource planning. Mr. Tracy stated at the hearing that Citizens would be willing to discuss any of those areas with the OUCC and the Commission. (Tr. at B-13, lines 16–18; B-14, line 14) Mr. Tracy also expressed Citizens' willingness to discuss resource planning in his prepared rebuttal testimony, stating:

We would be happy to work with the Commission, the OUCC and our customers to make sure they understand our plans to meet the needs of our customers in the future. Of course, we are willing to listen and incorporate suggested improvements into our planning.

(Pet. Exh. F at 7)

The OUCC, as well as individual Citizens ratepayers, should have a reasonable opportunity to analyze and comment on the long range resource plan of the utility. Inclusion in the early stages of the planning process certainly fosters such opportunity and serves to both increase understanding and perhaps even options to be evaluated. The absence of Commission steam utility specific resource planning rules and the fact that Citizens is the lone steam utility regulated by this Commission lead us to conclude the interests of all parties would be reasonably and efficiently served by such an inclusive effort. Furthermore, such process should at least initially be an informal process. Therefore, we find that Citizens and the interested parties in this case should begin an informal process to address the long range resource portfolio of the utility. We decline at this time to order a formal process of reviewing Citizens resource planning. Nonetheless, the importance of the process dictates that the Commission stand ready should the informal process become unproductive.

IT IS THEREFORE ORDERED BY THE INDIANA UTILITY REGULATORY COMMISSION that:

- 1. The Proposed Agreement, which we find to be just and economically reasonable to Citizens' retail steam ratepayers, is hereby approved.
- 2. Citizens is authorized to include costs incurred under the Proposed Agreement as discussed in Finding No. 7 above for consideration of recovery through its FAC Rider.
 - 3. This Order shall be effective on and after the date of its approval.

<u>LANDIS, SERVER AND ZIEGNER CONCUR; HARDY ABSENT:</u>

APPROVED: DEC 2 8 2006

I hereby certify that the above is a true and correct copy of the Order as approved.

Brenda A. Howe,

Secretary to the Commission

BEFORE THE

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF THE BOARD OF DIRECTORS)
FOR UTILITIES OF THE DEPARTMENT OF)
PUBLIC UTILITIES OF THE CITY OF)
INDIANAPOLIS, AS SUCCESSOR TRUSTEE)
OF A PUBLIC CHARITABLE TRUST, D/B/A)
CITIZENS THERMAL ENERGY FOR (1))
AUTHORITY TO INCREASE ITS RATES AND)
CHARGES FOR STEAM UTILITY SERVICE, (2)) CAUSE NO. 43201
APPROVAL OF A NEW SCHEDULE OF)
RATES AND CHARGES APPLICABLE)
THERETO, (3) APPROVAL OF CHANGES TO ITS)
GENERAL TERMS AND CONDITIONS FOR)
STEAM SERVICE, (4) APPROVAL OF NEW)
DEPRECIATION ACCRUAL RATES, AND (5))
APPROVAL FOR THE QUARTERLY FILING OF)
FUEL COST ADJUSTMENT APPLICATIONS.)

DIRECT TESTIMONY AND EXHIBIT of DONALD J. CLAYTON

On Behalf of Petitioner

Citizens Thermal Energy

Petitioner's Exhibit DJC

Direct Testimony of Donald J. Clayton Petitioner's Exhibit DJC Citizens Thermal Energy IURC Cause No. 43201 Page No. 1 of 17

1	Introduction	ANID	RACKCDOL	INID
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- 2 Q. PLEASE STATE YOUR NAME AND ADDRESS.
- 3 A. My name is Donald J. Clayton. My business address is 2492 Matterhon Dr., Wexford,
- 4 Pennsylvania, 15090.
- 5 Q. PLEASE IDENTIFY YOUR CURRENT POSITION AND EMPLOYER.
- 6 A. I am Vice President of Management Consulting at Tangibl, LLC.
- 7 Q. HOW LONG HAVE YOU BEEN ASSOCIATED WITH TANGIBL, LLC
- 8 A. I have been associated with Tangibl, LLC since April 2, 2007.
- 9 Q. PLEASE DESCRIBE TANGIBL, LLC.
- 10 A. Tangibl, LLC is an engineering firm serving water, wastewater, waste services and energy
- 11 utilities.
- 12 Q. WHO WAS YOUR EMPLOYER WHEN YOU COMPLETED THE
- 13 DEPRECIATION STUDY FOR CITIZENS GAS AND COKE UTILITY?
- 14 A. I was employed by Gannett Fleming, Inc.
- 15 Q. HOW LONG WERE YOU ASSOCIATED WITH GANNETT FLEMING, INC.?
- 16 A. I was associated with Gannett Fleming, Inc. from August, 1977 to March of 1983 and from
- 17 February, 2005 to March of 2007.
- 18 Q. PLEASE DESCRIBE GANETT FLEMING INC.
- 19 A. Gannett Fleming is an international planning, design, and construction management firm
- which provides full-service engineering services in the U.S. and abroad.

Direct Testimony of Donald J. Clayton Petitioner's Exhibit DJC Citizens Thermal Energy IURC Cause No. 43201 Page No. 2 of 17

1	Q.	WHAT WAS YOUR POSITION WITH GANNETT FLEMING WHEN YOU
2		COMPLETED THE DEPRECIATIN STUDY FOR CITIZENS GAS AND COKE
3		UTILITY?
4	A.	I was Director, Regulatory Economics.
5	Q.	WHAT IS YOUR EDUCATIONAL BACKGROUND?
6	A.	I have Bachelor of Science and Masters of Business Administration degrees from
7		Rensselaer Polytechnic Institute.
8	Q.	PLEASE DESCRIBE YOUR WORK EXPERIENCE.
9	A.	Throughout my career I have served public utilities in consulting and executive capacities.
10		Recent assignments include depreciation studies for electric, gas, water, wastewater,
11		thermal and railroad companies and cost of service and rate design studies for gas and
12		water utilities.
13		My detailed resume is attached to my testimony as Appendix A.
14	Q.	DO YOU BELONG TO ANY PROFESSIONAL SOCIETIES?
15	A.	Yes. I am a member of the Society of Depreciation Professionals.
16	Q.	DO YOU HOLD ANY SPECIAL CERTIFICATION AS A DEPRECIATION
17		EXPERT?
18	A.	Yes. The Society of Depreciation Professionals has established national standards for
19		depreciation professionals. The Society administers an examination to become certified in
20		this field. I passed the certification exam in April of 2005.

Direct Testimony of Donald J. Clayton Petitioner's Exhibit DJC Citizens Thermal Energy IURC Cause No. 43201 Page No. 3 of 17

1	Q.	DO YOU PARTICIPATE IN THE ANNUAL TRAINING PROGRAMS OFFERED
2		BY THE SOCIETY OF DEPRECIATION PROFESSIONALS?
3	A.	Yes. I am an instructor at the annual depreciation training sessions offered by the society.
4		I taught the basic life analysis course for the last two years and in 2005 taught the advanced
5		course on preparing and defending a depreciation study.
6	Q.	DO YOU HOLD ANY OTHER PROFESSIONAL CERTIFICATIONS?
7	A.	Yes. I am a Registered Professional Engineer in Pennsylvania and I am a Chartered
8		Financial Analyst.
9	Q.	HAVE YOU HAD FORMAL TRAINING RELATING TO DEPRECIATION AND
10		UTILITY ACCOUNTING?
11	A.	Yes. I completed 5 one-week programs offered by Depreciation Programs, Inc. in the areas
12		of actuarial and simulated life analysis, forecasting of life and net salvage, and preparing
13		and managing depreciation studies. I have also completed utility accounting seminars
14		offered by Price Waterhouse and Salomon Brothers.
15	Q.	HAVE YOU PRESENTED EXPERT TESTIMONY IN RATE AND
16		DEPRECIATION PROCEEDINGS BEFORE REGULATORY AGENCIES?
17	A.	Yes. I testified before the Pennsylvania Public Utility Commission on behalf of Duquesne
18		Light Company concerning depreciation and rate base at Docket Nos. R-860378 and R-
19		870651 and stranded cost and electric industry restructuring at Docket No. R-00974041. I
20		testified before the Regulatory Commission of Alaska concerning contributed water and
21		wastewater plant and depreciation at Docket Nos. U-04-22 and U-04-23. I submitted direct

Direct Testimony of Donald J. Clayton Petitioner's Exhibit DJC Citizens Thermal Energy IURC Cause No. 43201 Page No. 4 of 17

and rebuttal testimony to the West Virginia Public Service Commission ("Commission") on the subjects of electric company depreciation at Docket No. 06-1426-E-D and gas utility rate base, revenue requirements, cost of service and rate design at Docket No. 06-0445-G-42T. I also have appeared before the Superior Court of Monmouth County New Jersey on behalf of International Flavors and Fragrances (IFF) concerning cost of service and rate design for wastewater service. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING? I sponsor the depreciation study performed for the Steam Division of Citizens Thermal Energy ("Citizens" or "Company") and the resulting depreciation rates. PLEASE DEFINE THE TERM DEPRECIATION. Depreciation is the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes which can be reasonably anticipated or contemplated, against which the Company is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand and the requirements of public authorities. Depreciation, as used in utility accounting, is a method of distributing fixed capital costs, less net salvage, over a period of time by allocating annual amounts to expense.

Normally the period of time over which the fixed capital cost is allocated to expense is

equal to the period of time over which an item renders service.

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1	Q.	DID YOU PREPARE A DEPRECIATION STUDY ON BEHALF OF THE
2		COMPANY FOR USE IN THIS PROCEEDING?
3	A.	Yes. I prepared a depreciation study, portions of which are attached to my testimony as
4		Petitioner's Exhibit DJC-1. The full report consists of over 300 pages and is entitled:
5		"Depreciation Study - Calculated Annual Depreciation Accruals Related to Gas, Thermal
6		and Westfield Plant Assets at December 31, 2005." Exhibit DJC-1 sets forth the results of
7		my depreciation study for the Steam Division. I did not include in Exhibit DJC-1 those
8		portions of the depreciation study that relate to the Gas Division and CSS Division, the
9		Chilled Water Division and Citizens Gas of Westfield.
10	Q.	IN PREPARING THE DEPRECIATION STUDY, DID YOU FOLLOW
1		GENERALLY ACCEPTED PRACTICES IN THE FIELD OF DEPRECIATION?
12	A.	Yes.
13	Q.	WHAT IMPACT DID THE DEPRECIATION STUDY HAVE ON THE PROPOSED
14		DEPRECIATION RATES FOR THE COMPANY?
15	A.	As a result of the depreciation study, the depreciation rates for the Steam Division were
16		revised, which resulted in an increase in the Company's annual depreciation expense
17	Q.	PLEASE DESCRIBE THE CONTENTS OF YOUR STUDY OR REPORT.
18	A.	My report is presented in three parts. Part I, Introduction, presents the scope and basis for
19		the depreciation study. Part II, Methods Used in the Estimation of Depreciation, includes
20		descriptions of the methods used in the study related to the estimation of survivor curves
21		and net salvage and the calculation of annual and accrued depreciation. Part III, Results of

Direct Testimony of Donald J. Clayton
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Study, presents a description of the results, summaries of the depreciation calculations, graphs and tables that relate to the service life and net salvage analyses, and the detailed depreciation calculations.

A.

Schedule 2 on page III-7 presents a summary of the results of the study for the Steam Division including the estimated survivor curve, the net salvage percent, the original cost as of December 31, 2005, the book reserve, future accruals, the calculated annual depreciation accrual amount and rate and remaining life for each account or subaccount. The section beginning on page III-94 presents the results of the retirement rate analyses prepared as the historical bases for the service life estimates. The section beginning on page III-222 presents the detailed depreciation calculations related to surviving original cost as of December 31, 2005.

Q. PLEASE EXPLAIN HOW YOU PERFORMED YOUR DEPRECIATION STUDY.

I used the straight line remaining life method of depreciation, with the equal life group procedure. The annual depreciation is based on a method of depreciation accounting that seeks to distribute the unrecovered cost of fixed capital assets over the estimated remaining useful life of each group of assets, in a systematic and reasonable manner.

For General Plant Accounts 391, 393, 394, 395, 397 and 398, I used the straight line remaining life method with amortization accounting. The annual amortization amounts are based on distributing the unrecovered cost of the assets over the remaining amortization period selected for each account and vintage.

Direct Testimony of Donald J. Clayton Petitioner's Exhibit DJC Citizens Thermal Energy IURC Cause No. 43201 Page No. 7 of 17

1	Q.	HOW DID YOU DETERMINE THE RECOMMENDED ANNUAL
2		DEPRECIATION ACCRUAL RATES?
3	A.	I did this in two phases. In the first phase, I estimated the service life and net salvage
4		characteristics for each depreciable group, that is, each plant account or subaccount
5		identified as having similar life and net salvage characteristics. In the second phase, I
6		calculated the composite remaining lives and annual depreciation accrual rates based on the
7		service life and net salvage estimates determined in the first phase and the surviving plant
8		balances and related book depreciation as of December 31, 2005.
9	Q.	PLEASE DESCRIBE THE FIRST PHASE OF THE DEPRECIATION STUDY, IN
10		WHICH YOU ESTIMATED THE SERVICE LIFE AND NET SALVAGE
11		CHARACTERISTICS FOR EACH DEPRECIABLE GROUP.
12	A.	The service life and net salvage study consisted of compiling available historical data from
13		records related to the Steam Division; analyzing these data to obtain historical trends of
14		survivor characteristics where possible; obtaining supplementary information from
15		management and operating personnel concerning practices and plans as they relate to plant
16		operations; and interpreting the above data and the estimates used by other utilities for
17		similar property to form judgments of average service life and net salvage characteristics.
18	Q.	WHAT HISTORICAL DATA DID YOU ANALYZE FOR THE PURPOSE OF
19		ESTIMATING SERVICE LIFE CHARACTERISTICS?

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1	A.	For the life analysis portion of the Steam Division study, I analyzed the Companies' aged
2		retirement transactions for the period 2000 through 2005 and the surviving plant balances
3		as of December 31, 2005 by year installed.
4	Q.	WAS THE HISTORICAL RETIREMENT DATA SUFFICIENT TO FORM THE
5		BASIS FOR YOUR SERVICE LIFE ESTIMATES?
6	A.	The historical data were useful in analyzing the survivor characteristics of three of the large
7		mass property accounts, namely, Account 602 - Mains, Account 603 - Services and 604 -
8		Meters. These accounts represent 37% of the total Steam Division property and 83% of the
9		Steam Division mass property.
10	Q.	FOR THOSE ACCOUNTS WHERE THE HISTORIC DATA WERE SUFFICIENT
11		TO BE USED IN THE LIFE ANALYSIS WHAT METHOD DID YOU USE TO
12		ANALYZE THE DATA?
13	A.	I used the retirement rate method. This is the most appropriate method when aged
14		retirement data covering a reasonable period of time is available. The retirement rate
15		method determines the average rates of retirement actually experienced by the Company
16		during the period of time for which the data is available. Other methods of life analysis
17		infer the rates of retirement based on a selected type survivor curve.
18	Q.	PLEASE DESCRIBE HOW YOU USED THE RETIREMENT RATE METHOD.
19	A.	For the Mains, Services and Meters accounts I used the retirement rate method to construct
20		an original life table using the available retirement and survivor data. Under the retirement
21		rate method each original life table shows the amount of property available for, or exposed

to, retirement; the actual retirements that occurred; the ratio of retirements to exposures; the survivor ratio and the percent surviving by age interval. Each original life table also shows the period during which property was placed in service (i.e. the "placement band") and the period during which the retirements were made (i.e. the "experience band"). The percents surviving by age interval from the original life table were then plotted to show the original survivor curve for the property group. Although each original survivor curve does represent the average survivor pattern experienced by the several vintage groups during the experience band, it does not necessarily completely describe the life characteristics of the property group. As such, interpretation of the original survivor curves is required to arrive at the estimated survivor characteristics. The Iowa type survivor curves were used to perform these interpretations.

Q.

HOW DID YOU ARRIVE AT THE SURVIVOR CHARACTERISTICS FOR THE OTHER STEAM DIVISION PROPERTY GROUPS?

The estimated service life characteristics for land and land rights, transportation equipment and power operated equipment and the interim survivor characteristics for the Perry K Plant were based on judgment, which incorporated information obtained during discussions with management and field reviews, analysis of Company data for other divisions with similar property and estimates used by other utility companies for similar property. The survivor characteristics for land and land rights, transportation equipment and power operated equipment as well as the interim survivor characteristics for the Perry K Plant were expressed as Iowa type survivor curves. To completely describe the survivor

characteristics of the Perry K Plant a probable retirement date also was estimated (see discussion of the life span technique below). For the balance of the property groups amortization accounting was used and the amortization periods were based on typical amortization periods used by other utility companies for similar property (see additional discussion on amortization accounting below).

A.

Q. WHAT IS AN "IOWA TYPE SURVIVOR CURVE" AND HOW DID YOU USE

SUCH CURVES TO ESTIMATE SERVICE LIFE CHARACTERISTICS?

Iowa type curves are a widely-used group of survivor curves that contain the range of survivor characteristics usually experienced by utility and other industrial property. The Iowa curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observing and classifying the ages at which various types of property used by utilities and other industrial companies had been retired.

Iowa type curves are used to smooth and extrapolate original survivor curves determined by the retirement rate method. The Iowa curves and truncated Iowa curves were used in this study to describe the forecasted rates of retirement based on the observed rates of retirement and the outlook for future retirements.

The estimated survivor curve designations for each depreciable property group indicate the average service life, the family within the Iowa system to which the property group belongs, and the relative height of the mode. For example, the Iowa 55-R3 indicates an average service life of fifty-five years; a right-moded retirement frequency curve, or R, type curve (the mode of the retirement frequency occurs after average life for right-moded

1 curves); and a medium height, 3, for the mode (possible modes for R type curves range 2 from 1 to 5).

3 Q. WHAT APPROACH DID YOU USE TO ESTIMATE THE LIFE

CHARACTERISTICS FOR THE PERRY K PLANT?

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A.

I used the life span technique to estimate the life characteristics of the Perry K plant. This life span technique is appropriate in situations where concurrent retirement of the facilities at a particular location is expected. In the life span technique, the survivor characteristics of such facilities are described by the use of interim survivor curves and estimated probable retirement dates.

The interim survivor curves describe the rate of retirement related to the replacement of elements of the facility, such as, pumps, motors, piping, boiler tubes, stacks, etc., that occur during the life of the facility. The probable retirement date provides the date of final retirement for each year of installation for the facility by truncating the interim survivor curve for each installation year at its age at the date of probable retirement. The use of interim survivor curves truncated at the date of probable retirement provides a consistent method for estimating the lives of the several years of installation for a particular facility inasmuch as a single concurrent retirement for all years of installation is expected at the time of retirement.

19 Q. HAS GANNETT FLEMING USED THIS APPROACH IN OTHER UTILITY 20 REGULATORY PROCEEDINGS?

Direct Testimony of Donald J. Clayton Petitioner's Exhibit DJC Citizens Thermal Energy IURC Cause No. 43201 Page No. 12 of 17

- 1 A. Yes, Gannett Fleming has used the life span technique in performing depreciation studies 2 presented to and accepted by the Commission and many other public utility commissions 3 across the United States.
- 4 Q. WHAT IS THE BASIS FOR THE PROBABLE RETIREMENT DATE THAT YOU
 - HAVE ESTIMATED FOR THE PERRY K PLANT?

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- A. The probable retirement date and the resulting life span for the Perry K facility are based on judgment and incorporate consideration of the age, use, size, nature of the facility, management outlook and typical life spans experienced and used by other utilities with similar facilities.
- 10 Q. WOULD YOU PLEASE EXPLAIN THE CONCEPT OF "NET SALVAGE?"
- 11 For most regulated utility companies net salvage is recognized as a component of the Α. 12 service value of a capital asset that is charged to each accounting period through 13 depreciation expense. The service value of an asset is defined as its original cost less any 14 net salvage. Net salvage is the gross salvage value received for the asset upon retirement 15 less the cost to retire the asset. When the cost to retire exceeds the gross salvage value, the 16 result is negative net salvage. Net salvage must be included in depreciation expense if the 17 full service value of an asset is to be recognized over the period during which an asset 18 renders service (i.e. over its service life). Under the straight line method equal portions of 19 an asset's service value are charged to expense for each unit of service rendered. Usually 20 the total service value is divided into units of time such as years or months.

1	Q.	HOW DID YOU ESTIMATE NET SALVAGE FOR THE VARIOUS PROPERTY
2		GROUPS WITH THE STEAM DIVISION?
3	A.	The net salvage estimates are based on judgment which incorporates management's
4		outlook and plans, estimates made for similar property in other Company divisions and
5		estimates used by other utilities with similar property.
6	Q.	DID YOU PHYSICALLY OBSERVE THE COMPANY'S PLANT AND
7		EQUIPMENT AS PART OF YOUR DEPRECIATION STUDY?
8	A.	Yes. On March 15, 2005 I toured the Perry K Plant, which is the main visible asset of the
9		Steam Division. The tour was conducted to become familiar with the Company's
10		operation and obtain an understanding of the function of the plant and to gain information
11		with respect to the reasons for past retirements and the expected future causes of
12		retirements. This knowledge was incorporated into the estimated life characteristics of the
13		Perry K Plant.
14	Q.	PLEASE DESCRIBE AMORTIZATION ACCOUNTING.
15	A.	Under amortization accounting, units of property are capitalized in the same manner as
16		they are under depreciation accounting, but are retired based on a predetermined schedule
17		The scheduling of retirements is different than depreciation accounting where retirements
18		are made when units of property are removed from service. Amortization accounting is
19		appropriate for accounts with large numbers of units and small individual asset values and
20		where depreciation accounting is burdensome because periodic inventories and other

administrative efforts that are necessary to properly identify retirements which have

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Direct Testimony of Donald J. Clayton Petitioner's Exhibit DJC Citizens Thermal Energy IURC Cause No. 43201 Page No. 14 of 17

occurred. Under amortization accounting, each plant account or group of assets that is amortized is assigned an amortization period which is representative of the anticipated average service life of the group. Generally, for property groups where amortization accounting is appropriate, little or no net salvage is expected.

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For example, in amortization accounting, assets that have a 20-year amortization period will be fully recovered after 20 years of service and taken off the Company books, but not necessarily removed from service. In contrast, assets that are taken out of service before 20 years remain on the books until the amortization period for that vintage has expired. For the amortization accounts gains and losses on realized salvage and cost of removal are recognized in current income.

- 11 Q. PLEASE DESCRIBE THE SECOND PHASE OF THE PROCESS THAT YOU

 12 USED IN THE DEPRECIATION STUDY IN WHICH YOU CALCULATED

 13 COMPOSITE REMAINING LIVES AND ANNUAL DEPRECIATION ACCRUAL

 14 RATES.
- A. After I estimated the service life and net salvage characteristics for each depreciable property group, I calculated the annual depreciation accrual rates for each group based on the straight line remaining life method, using remaining lives weighted consistent with the equal life group procedure. The annual depreciation accrual rates were developed as of December 31, 2005.
- Q. PLEASE DESCRIBE THE STRAIGHT LINE REMAINING LIFE METHOD OF
 DEPRECIATION.

i	A.	The straight line remaining life method of depreciation allocates the original cost of the
2		property, less accumulated depreciation, less future net salvage, in equal amounts to each
3		year of remaining service life.
4	Q.	PLEASE DESCRIBE THE EQUAL LIFE GROUP PROCEDURE THAT YOU
5		USED IN CONJUNCTION WITH THE STRAIGHT LINE REMAINING
6		METHOD.
7	A.	The equal life group procedure is a method for determining the remaining life annual
8		accrual for each vintage property group. Under this procedure, the future book accruals
9		(original cost less book reserve) for each vintage are divided by the composite remaining
10		life for the surviving original cost of that vintage. The vintage composite remaining life is
11		derived by summing the original cost less the calculated reserve for each equal life group
12		and dividing by the sum of the whole life annual accruals.
13	Q.	PLEASE USE AN EXAMPLE TO ILLUSTRATE HOW THE ANNUAL
14		DEPRECIATION ACCRUAL RATE FOR A PARTICULAR GROUP OF
15		PROPERTY IS PRESENTED IN YOUR DEPRECIATION STUDY.
16	A.	I will use Account 602, Mains, as an example because it is the largest mass property
17		account of the Steam Division and represents nearly one third of its depreciable plant.
18		The retirement rate method was used to analyze the survivor characteristics of this
19		property group. Aged plant accounting data was compiled from 2000 through 2005. The
20		life table for the 2000-2005 experience band is presented on pages III-96 and III-97 of the
21		report. The life table displays the retirement and surviving ratios of the aged plant data

Direct Testimony of Donald J. Clayton
Petitioner's Exhibit DJC
Citizens Thermal Energy
IURC Cause No. 43201
Page No. 16 of 17

exposed to retirement by age interval. For example, page III-96 shows \$9,422 retired at age 4.5 with \$1,032,729 exposed to retirement. Consequently, the retirement ratio is .0091 and the surviving ratio is 0.9909. This life table, or original survivor curve, is plotted along with the estimated smooth survivor curve, the 55-L1.5 on page III-95.

The estimated net salvage percent of negative 5% for this account is based on the expectation that most of the Company's mains will be abandoned in place when they are retired and only a small cost to cut and cap the mains will be incurred. Negative 5% is on the low end of the range for utilities with similar mains but is consistent with the company's current policies, plans and outlook.

The calculation of the annual depreciation related to the original cost at December 31, 2005, for Account 602, Mains is presented on pages III-243 through III-244. The calculation is based on the 55-L1.5 survivor curve, 5% negative net salvage, the attained age, and the allocated book reserve. The tabulation sets forth the installation year, the original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual. These totals are brought forward to Schedule 2 on page III-7.

CONCLUSION

- 18 Q. DO YOU HAVE AN OPINION CONCERNING THE DEPRECIATION RATES
 19 THE COMPANY SHOULD USE AS A RESULT OF CONDUCTING THE STUDY
 20 ATTACHED TO YOUR TESTIMONY AS PETITIONER'S EXHIBIT DJC-1?
- 21 A. Yes, I do.

Direct Testimony of Donald J. Clayton Petitioner's Exhibit DJC Citizens Thermal Energy IURC Cause No. 43201 Page No. 17 of 17

- 1 A. In my opinion, the Company should adopt and use the depreciation rates in the study
- 2 instead of the prior depreciation rates which were established many years ago and are
- 3 outdated.
- 4 Q. DOES THIS CONCLUDE YOUR TESTIMONY?
- 5 A. Yes.

1	
2	<u>VERIFICATION</u>
3	
4	STATE OF INDIANA)
5) ss:
6	COUNTY OF MARION)
7)
8	The undersigned, Donald J. Clayton, under penalties of perjury and being first duly
9	sworn on his oath, says that he is a consultant with Tangibl, LLC; that he caused to be
10	prepared and read the foregoing Direct Testimony; and that the representations set
11	forth therein are true and correct to the best of his knowledge, information and belief.
12	form therein are true and correct to the best of mis knowledge, information and benef.
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	Donald J. Clayto
	Manual J. May 8
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15	D. D. all I Class
16	By: Donald J. Clayton
17	Tangibl, LLC
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19	Subscribed and gream to before me a Neteric Dublic this 30 day of MAK//0 2007
20	Subscribed and sworn to before me, a Notary Public, this 30 day of MWW, , 2007.
21	Mules al Cale & 1
22	Cianatura State of the State of
23	Signature /
24	Emily M. Salatich
25	Printed Name
26	Printed Name
27	My Commission Expires: 10/19/2013
28	
29	My County of Residence: Marin SEAL
30	My County of Residence: IV(W 1V/L
31	My County of Residence: Marim
	The state of the s
	William Market

RESUME

DONALD J. CLAYTON, P.E.

TECHNICAL SPECIALTIES

- Public Utility Valuation and Depreciation
- Public Utility Plant and Rate Base
- Public Utility Cost of Service and Rate Design
- Economic Analysis and Financial Modeling

PERSONAL INFORMATION

MBA, Rensselaer Polytechnic Institute
B.S., Civil Engineering, Rensselaer Polytechnic Institute
Registered Professional Engineer: Pennsylvania
Certified Depreciation Professional
Chartered Financial Analyst
Society of Depreciation Professionals - Member and Instructor

EXPERIENCE

As Vice President of Management Consulting at Tangibl, LLC, Mr. Clayton is responsible for a wide range of assignments including depreciation studies for electric, gas, water, wastewater, thermal and railroad companies and cost of service and rate design studies for gas and water utilities.

Prior to joining Tangibl, LLC, he was Director, Regulatory Economics at Gannett Fleming, Inc. In that capacity Mr. Clayton performed depreciation, cost of service and rate design studies for utilities and railroads.

Representative assignments include:

• Allegheny Energy, Inc., Greensburg, Pennsylvania – Depreciation Studies of Regulated Electric Companies in West Virginia and Unregulated Generation Plant. The studies included development of annual depreciation rates for regulated electric plant in service in West Virginia and the unregulated generating plant throughout the system. The elements of the study included a field inspection of power plants, major substations, operations centers and office buildings; discussions with management regarding outlook; statistical analyses of service life and net salvage, and calculation of annual and accrued depreciation using several alternative bases and procedures. The depreciation study for the regulated West Virginia Utilities was filed with the West Virginia Public Service Commission in September 2006.

<u>Citizens Gas & Coke Utility, Indianapolis, Indiana – Depreciation Studies of Gas and Thermal Plant.</u> The studies involved development of annual depreciation rates for gas and thermal plant. Field inspections of the facilities were performed, discussions with management regarding outlook were held, statistical analyses of service life and salvage data were conducted and annual and accrued depreciation were calculated.

DONALD J. CLAYTON, cont.

- East Kentucky Power Cooperative, Winchester, Kentucky Depreciation Studies of Electric Plant. The study involved development of annual depreciation rates for the company's electric plant including generation, transmission and general plant. The study included a field inspection of power plants, major substations, operations centers and office buildings; discussions with management regarding outlook; statistical analyses of service life and net salvage, and calculation of annual and accrued depreciation. The depreciation study filed with the Kentucky Public Service Commission in May of 2006 and the Rural Utilities Service in June of 2006.
- Anchorage Water and Wastewater Utility (AWWU), Anchorage, Alaska Testimony on Contributed Plant and Depreciation Studies for Water and Wastewater Plant. The first assignment included rebuttal testimony on behalf of the company related to its accounting treatment of contributed plant. The depreciation studies included field inspections of the treatment plants, major pumping stations, and offices; discussions with management regarding outlook; data assembly; statistical analysis of service life and net salvage; and calculation of annual and accrued depreciation related to pant in service as of December 31, 2005.
- Kansas City Southern Railroad (KCS), Kansas City, Missouri Capitalization Policy and Depreciation Studies for Kansas City Southern, Kansas City Southern de Mexico, and Texas Mexican Railway. The first assignment involved development of a revised capitalization policy. The Company's existing capitalization policy and retirement units catalogue were compared with those of other class I and passenger railroad companies and revisions were suggested and subsequently adopted by the company. The depreciation studies involved discussions with management regarding outlook, statistical aging of the subsidiary company property, service life and net salvage analysis and calculating of annual and accrued depreciation.
- <u>East Resources, Inc., Base Rate Case Filing.</u> The assignment involved preparation of a complete base rate case filing for the Company's West Virginia gas utility division. Exhibits were prepared in conformance with the West Virginia Commission's filing requirements under Rule 42. Direct testimony was prepared and responses to numerous data requests were completed. The case was filed in April 2006 and was settled in September 2006.

Prior to rejoining Gannett Fleming, he was President and COO of Conjunction LLC, a company formed to develop a high voltage direct current transmission line from upstate New York to New York City. Previous to that, he was a partner at Energy Leader Consulting, a firm that provided strategic consulting to energy companies concerning opportunities related to electric generating stations.

Before forming Energy Leader Consulting, Mr. Clayton spent 15 years at DQE (now Duquesne Light Holdings), where he held various positions including President of the AquaSource subsidiary, Vice President and Treasurer and Manager of the Valuation and Property Records Department. Just prior to joining DQE, he was a Manager in the Public Utility Industry Specialty Group of Price Waterhouse where he performed cost of service and depreciation studies for

DONALD J. CLAYTON, cont.

electric, gas, water and wastewater clients. In 1977, he began his professional career at Gannett Fleming, where he performed numerous studies in the areas of depreciation and cost of service for electric, gas, telephone, water, wastewater and railroad companies. Mr. Clayton has presented expert testimony before the Pennsylvania Public Utility Commission, the Alaska Public Utilities Commission and Monmouth County Court in New Jersey.

While at Conjunction LLC, Mr. Clayton was responsible for the day-to-day activities of the firm, raising equity capital to fund the project and negotiation of numerous contracts and agreements between the Company and its consultants, lawyers, land owners and investors. During his tenure at Conjunction, he was responsible for the preparation of the Company's transmission siting filing under Article VII before the New York Public Service Commission and the FERC filing for merchant transmission line status.

At Energy Leader Consulting, Mr. Clayton's client assignments included acquisition analysis for generating stations, identification of power plant development opportunities throughout the U.S. market and diagnostic studies for electric generators. He also headed a multi-million dollar study for Amtrak to determine the feasibility of using their railroad rights-of-way for electric transmission.

During his employment at DQE, Mr. Clayton developed and directed the AquaSource subsidiary where he managed all aspects of a rapidly-growing business, including development of the initial business plan, integration of acquisition targets, recruitment of executive staff, and political and regulatory relations. He also headed the rate case filed in Texas for a statewide tariff related to the small water and wastewater companies acquired by AquaSource. As Vice President and Treasurer, he was responsible for corporate finance, financial planning, corporate budgeting, cash management and investor and shareholder relations during a period of unprecedented organizational and marketplace changes. While he was Vice President and Treasurer, he was the stranded cost witness for Duquesne Light Company in their restructuring proceeding before the Pennsylvania Public Utility Commission. Mr. Clayton's first position with DQE was as Manager of the Valuation and Property Records (Fixed Assets) department, where he was responsible for the Company's \$5+ billion of fixed assets and the construction cost accounting system, at a time when two nuclear electrical generation plants were being built and added to rate base. While in this position, he was the company's rate base and depreciation witness in it's two largest rate cases.

While at Price Waterhouse, Mr. Clayton performed numerous cost of service, rate design, depreciation and other valuation and rate related assignments for electric, gas, water and sewer clients in the public and private sectors. He also developed a PC-based cost of service program and completed a program for evaluating street lighting.

During his prior years at Gannett Fleming, Mr. Clayton completed assignments for more than 50 companies, including electric, gas, water, telephone and railroad clients. He participated in the valuation related to the \$2.1 Billion conveyance of the former Penn Central Railroad to Conrail and provided the analytics for three successful tax cases involving more than \$300 million in tax depreciation for the Union Pacific Railroad, the Burlington Northern and the C & O Railroad.

Mr. Clayton's technical education has included completion of all of the programs offered by Depreciation Programs, Inc. He has also completed management training courses offered by the Edison Electric Institute and utility accounting seminars offered by Salomon Brothers.

DONALD J. CLAYTON, cont.

Mr. Clayton is an active member of the Society of Depreciation Professional where he is an instructor at their annul depreciation training sessions. He has taught the basic life analysis course and the advanced course on preparing and defending a depreciation study.

BEFORE THE

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF THE BOARD OF DIRECTORS)	
FOR UTILITIES OF THE DEPARTMENT OF)	
PUBLIC UTILITIES OF THE CITY OF)	
INDIANAPOLIS, AS SUCCESSOR TRUSTEE)	
OF A PUBLIC CHARITABLE TRUST, D/B/A)	
CITIZENS THERMAL ENERGY FOR (1))	
AUTHORITY TO INCREASE ITS RATES AND)	
CHARGES FOR STEAM UTILITY SERVICE, (2)) (CAUSE NO. 43201
APPROVAL OF A NEW SCHEDULE OF)	
RATES AND CHARGES APPLICABLE)	
THERETO, (3) APPROVAL OF CHANGES TO ITS)	
GENERAL TERMS AND CONDITIONS FOR)	•
STEAM SERVICE, (4) APPROVAL OF NEW)	
DEPRECIATION ACCRUAL RATES, AND (5))	
APPROVAL FOR THE QUARTERLY FILING OF)	
FUEL COST ADJUSTMENT APPLICATIONS.)	

DEPRECIATION STUDY OF PETITIONER CITIZENS THERMAL ENERGY

CITIZENS GAS & COKE UTILITY

INDIANAPOLIS, INDIANA

DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO GAS, THERMAL
AND WESTFIELD PLANT ASSETS
AT DECEMBER 31, 2005





GANNETT FLEMING, INC. P.O. Box 67100 Harrisburg, PA 17106-7100

Location: 207 Senate Avenue Camp Hill, PA 17011

Office: (717) 763-7211 Fax: (717) 763-4590 www.gannettfleming.com

July 17, 2006

Citizens Gas & Coke Utility 2020 North Meridian Street Indianapolis, IN 46202

Attention Mr. Carey B. Lykins Vice President & Chief Financial Officer

Ladies & Gentlemen:

Pursuant to your request, we have conducted a depreciation study related to the gas, thermal and Westfield plant assets of Citizens Gas & Coke Utility as of December 31, 2005. The attached report presents a description of the methods used in the estimation of depreciation, the summary of annual and accrued depreciation, the statistical support for the service life and net salvage estimates and the detailed tabulations of annual and accrued depreciation.

Respectfully submitted,

GANNETT FLEMING, INC.

John J. Sparos

JOHN J. SPANOS

Vice President

DONALD J. CLAYTON, P.E. Director, Regulatory Economics

JJS/DJC:krm

CITIZENS GAS & COKE UTILITY

Indianapolis, Indiana

DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS

RELATED TO GAS, THERMAL AND WESTFIELD PLANT ASSETS

AT DECEMBER 31, 2005

GANNETT FLEMING, INC. - VALUATION AND RATE DIVISION

Harrisburg, Pennsylvania

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PART I. INTRODUCTION

CITIZENS GAS & COKE UTILITY

DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS, THERMAL AND WESTFIELD PLANT ASSETS AT DECEMBER 31, 2005

PART I. INTRODUCTION

SCOPE

This report presents the results of the depreciation study prepared for selected plant in service assets of Citizen's Gas and Coke Utility ("Company" or "Utility") as of December 31, 2005. The study relates to gas utility plant within the Gas Operations and Customer Shared Services (CSS) Division, Steam and Chilled Water assets within the Thermal Division and the Westfield gas utility property. The report describes the concepts, methods and basic judgments which underlie the recommended annual depreciation accrual rates related to the assets studied.

The service life and net salvage estimates resulting from the study were based on informed judgment which incorporated analyses of historical plant retirement data as recorded through 2005; a review of Company practice and outlook related to plant operation and retirement; and consideration of current practice in the gas and thermal industries, including knowledge of service life and salvage estimates used for other gas and thermal properties.

PLAN OF REPORT

Part I, Introduction, includes brief statements of the scope and basis of the study. Part II presents descriptions of the methods used in the service life and salvage studies and the methods and procedures used in the calculation of depreciation. Part III

presents the results of the study, including summary tables, survivor curve charts and life tables resulting from the retirement rate method of analysis; tabular results of the historical net salvage analyses; and detailed tabulations of the calculated remaining lives and annual accruals.

BASIS OF STUDY

Depreciation

For most accounts, the annual depreciation was calculated by the straight line method using the equal life group procedure and the remaining life basis. For certain General Plant accounts, the annual depreciation was based on amortization accounting. The calculated remaining lives and annual depreciation accrual rates were based on attained ages of plant in service and the estimated service life and salvage characteristics of each depreciable group.

Survivor Curve Estimates

The procedure for estimating survivor curves, which define service lives and remaining lives, consisted of compiling historical service life data for the plant accounts or other depreciable groups, analyzing the historical data base through the use of accepted techniques, and forecasting the survivor characteristics for each depreciable account or group. These forecasts were based on interpretations of the historical data analyses and the probable future. The combination of the historical data and the estimated future trend yields a complete pattern of life characteristics, i.e., a survivor curve, from which the average service life and remaining service life are derived.

The historical data analyzed for life estimation purposes were compiled through 2005 from the Company's plant accounting records. Such data included plant additions,

retirements, transfers and other activity recorded by the Company for each of its plant accounts and subaccounts.

The estimates of net salvage incorporated a review of experienced costs of removal and salvage related to plant retirements, and considerations of trends exhibited by the historical data. Each component of net salvage, i.e., cost of removal and salvage, was stated in dollars and as a percent of retirement for purposes of estimating average future levels of the components, as well as of net salvage.

An understanding of the function of the plant and information with respect to the reasons for past retirements and the expected causes of future retirements was obtained through field trips and discussions with operating and management personnel. The supplemental information obtained in this manner was considered in the interpretation and extrapolation of the statistical analyses.

Calculation of Depreciation

The depreciation accrual rates were calculated using the straight line method, the remaining life basis and the equal life group depreciation procedure. The life span technique was used for the Perry K Plant. In this technique, an average date of final retirement was estimated, and the estimated survivor curves applied to each vintage were truncated at ages coinciding with the dates of final retirement. Annual and accrued amortization was calculated for certain general plant accounts. An explanation of the calculation of annual and accrued amortization is presented on page II-33 of the report.

PART II. METHODS USED IN THE ESTIMATION OF DEPRECIATION

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PART II. METHODS USED IN
THE ESTIMATION OF DEPRECIATION

PART II. METHODS USED IN THE ESTIMATION OF DEPRECIATION

DEPRECIATION

Depreciation, in public utility regulation, is the loss in service value not restored by current repairs or covered by insurance.

Depreciation, as used in accounting, is a method of distributing fixed capital costs, less net salvage, over a period of time by allocating annual amounts to expense. Each annual amount of such depreciation expense is part of that year's total cost of providing utility service. Normally, the period of time over which the fixed capital cost is allocated to the cost of service is equal to the period of time over which an item renders service, that is, the item's service life. The most prevalent method of allocation is to distribute an equal amount of cost to each year of service life. This method is known as the straight line method of depreciation.

The calculation of annual depreciation based on the straight line method requires the estimation of average life and net salvage. These subjects are discussed in the sections which follow.

SERVICE LIFE AND NET SALVAGE ESTIMATION

Average Service Life

The use of an average service life for a property group implies that the various units in the group have different lives. Thus, the average life may be obtained by determining the separate lives of each of the units, or by constructing a survivor curve by plotting the number of units which survive at successive ages. A discussion of the general concept of survivor curves is presented. Also, the lowa type survivor curves are reviewed.

Survivor Curves

The survivor curve graphically depicts the amount of property existing at each age throughout the life of an original group. From the survivor curve, the average life of the group, the remaining life expectancy, the probable life, and the frequency curve can be calculated. In Figure 1, a typical smooth survivor curve and the derived curves are illustrated. The average life is obtained by calculating the area under the survivor curve, from age zero to the maximum age, and dividing this area by the ordinate at age zero. The remaining life expectancy at any age can be calculated by obtaining the area under the curve, from the observation age to the maximum age, and dividing this area by the percent surviving at the observation age. For example, in Figure 1, the remaining life at age 30 is equal to the crosshatched area under the survivor curve divided by 29.5 percent surviving at age 30. The probable life at any age is developed by adding the age and remaining life. If the probable life of the property is calculated for each year of age, the probable life curve shown in the chart can be developed. The frequency curve presents the number of units retired in each age interval and is derived by obtaining the differences between the amount of property surviving at the beginning and at the end of each interval.

lowa Type Curves. The range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized survivor curves known as the lowa type curves. There are four families in the lowa system, labeled in accordance with the location of the modes of the retirements in relationship to the average life and the relative height of the modes. The left moded curves, presented in Figure 2, are those in which the greatest frequency of retirement occurs to the left of, or prior to, average service life. The symmetrical moded curves, presented in Figure 3, are those in which the greatest frequency of retirement occurs at average service life. The right moded curves,

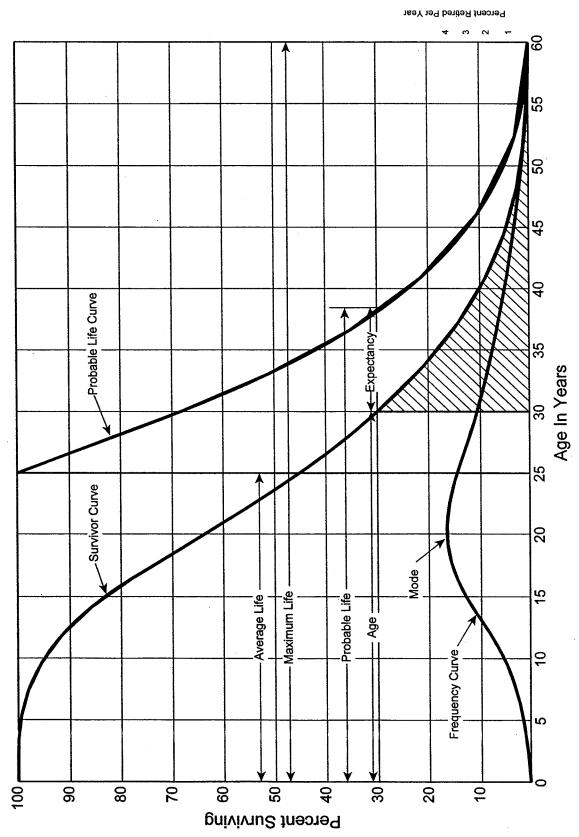


Figure 1. A Typical Survivor Curve and Derived Curves

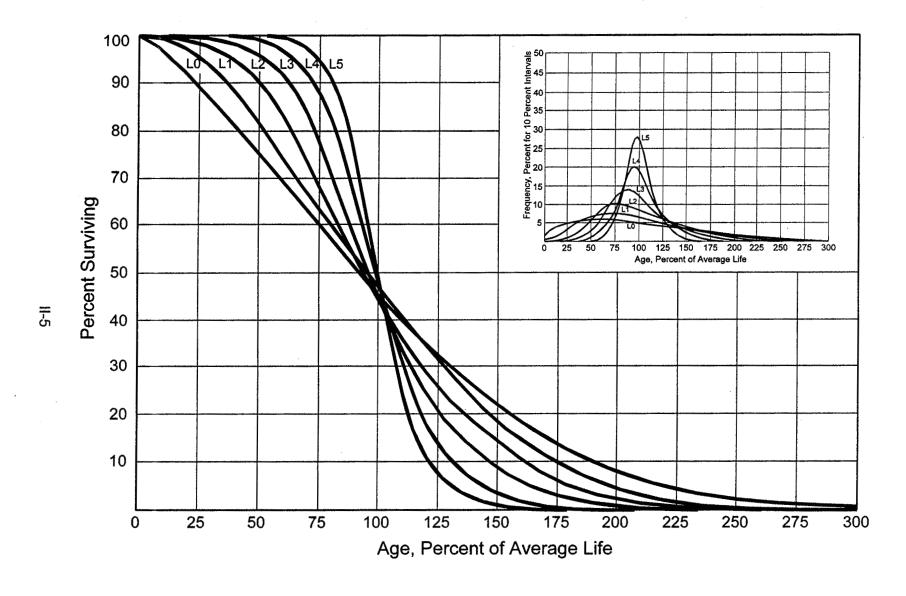


Figure 2. Left Modal or "L" Iowa Type Survivor Curves

Figure 3. Symmetrical or "S" lowa Type Survivor Curves

presented in Figure 4, are those in which the greatest frequency occurs to the right of, or after, average service life. The origin moded curves, presented in Figure 5, are those in which the greatest frequency of retirement occurs at the origin, or immediately after age zero. The letter designation of each family of curves (L, S, R or O) represents the location of the mode of the associated frequency curve with respect to the average service life. The numbers represent the relative heights of the modes of the frequency curves within each family.

The lowa curves were developed at the lowa State College Engineering Experiment Station through an extensive process of observation and classification of the ages at which industrial property had been retired. A report of the study which resulted in the classification of property survivor characteristics into 18 type curves, which constitute three of the four families, was published in 1935 in the form of the Experiment Station's Bulletin 125.¹ These type curves have also been presented in subsequent Experiment Station bulletins and in the text, "Engineering Valuation and Depreciation."² In 1957, Frank V. B. Couch, Jr., an lowa State College graduate student, submitted a thesis³ presenting his development of the fourth family consisting of the four O type survivor curves.

Retirement Rate Method of Analysis

The retirement rate method is an actuarial method of deriving survivor curves using the average rates at which property of each age group is retired. The method relates to

¹Winfrey, Robley. <u>Statistical Analyses of Industrial Property Retirements</u>. Iowa State College, Engineering Experiment Station, Bulletin 125. 1935.

²Marston, Anson, Robley Winfrey and Jean C. Hempstead. <u>Engineering Valuation</u> and <u>Depreciation</u>, 2nd Edition. New York, McGraw-Hill Book Company. 1953.

³Couch, Frank V. B., Jr. "Classification of Type O Retirement Characteristics of Industrial Property." Unpublished M.S. thesis (Engineering Valuation). Library, Iowa State College, Ames, Iowa. 1957.

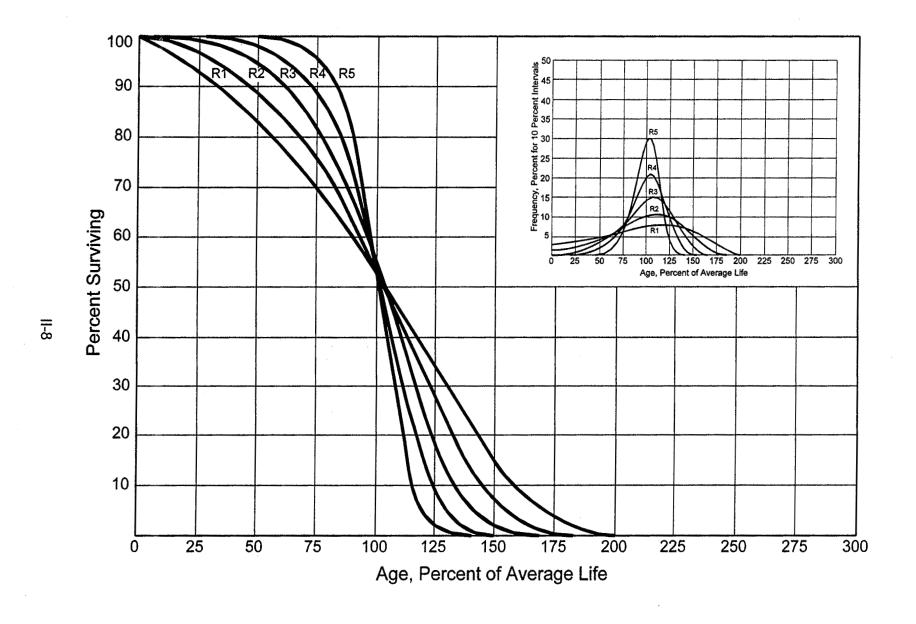


Figure 4. Right Modal or "R" lowa Type Survivor Curves

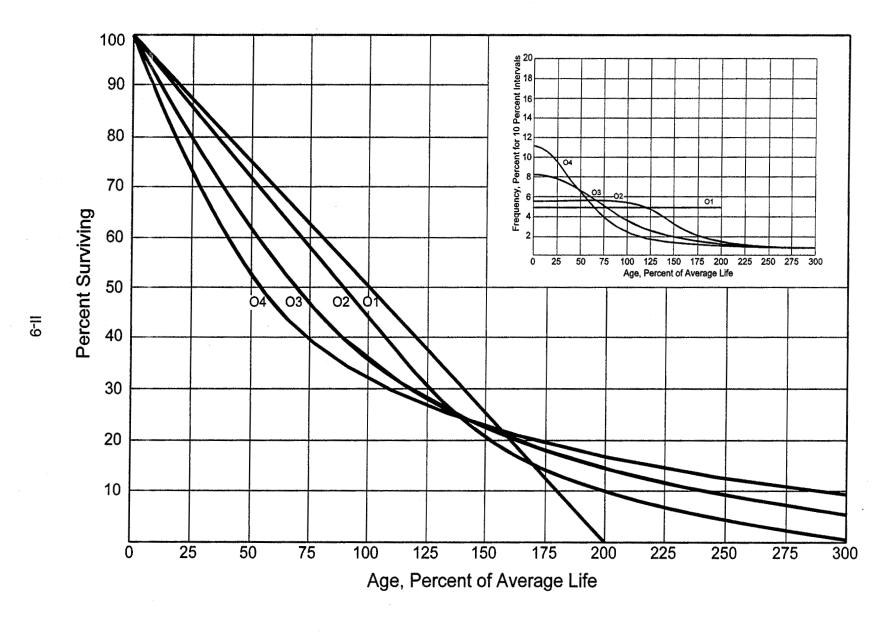


Figure 5. Origin Modal or "O" lowa Type Survivor Curves

property groups for which aged accounting experience is available or for which aged accounting experience is developed by statistically aging unaged amounts and is the method used to develop the original stub survivor curves in this study. The method (also known as the annual rate method) is illustrated through the use of an example in the following text, and is also explained in several publications, including "Statistical Analyses of Industrial Property Retirements," "Engineering Valuation and Depreciation," and "Depreciation Systems."

The average rate of retirement used in the calculation of the percent surviving for the survivor curve (life table) requires two sets of data: first, the property retired during a period of observation, identified by the property's age at retirement; and second, the property exposed to retirement at the beginnings of the age intervals during the same period. The period of observation is referred to as the experience band, and the band of years which represent the installation dates of the property exposed to retirement during the experience band is referred to as the placement band. An example of the calculations used in the development of a life table follows. The example includes schedules of annual aged property transactions, a schedule of plant exposed to retirement, a life table and illustrations of smoothing the stub survivor curve.

Schedules of Annual Transactions in Plant Records. The property group used to illustrate the retirement rate method is observed for the experience band 1996-2005 during which there were placements during the years 1991-2005. In order to illustrate the summation of the aged data by age interval, the data were compiled in the manner

⁴Winfrey, Robley, Supra Note 1.

⁵Marston, Anson, Robley Winfrey, and Jean C. Hempstead, Supra Note 2.

⁶Wolf, Frank K. and W. Chester Fitch. <u>Depreciation Systems</u>. Iowa State University Press. 1994

presented in Tables 1 and 2 on pages II-12 and II-13. In Table 1, the year of installation (year placed) and the year of retirement are shown. The age interval during which a retirement occurred is determined from this information. In the example which follows, \$10,000 of the dollars invested in 1991 were retired in 1996. The \$10,000 retirement occurred during the age interval between 4½ and 5½ years on the basis that approximately one-half of the amount of property was installed prior to and subsequent to July 1 of each year. That is, on the average, property installed during a year is placed in service at the midpoint of the year for the purpose of the analysis. All retirements also are stated as occurring at the midpoint of a one-year age interval of time, except the first age interval which encompasses only one-half year.

The total retirements occurring in each age interval in a band are determined by summing the amounts for each transaction year-installation year combination for that age interval. For example, the total of \$143,000 retired for age interval 4½-5½ is the sum of the retirements entered on Table 1 immediately above the stairstep line drawn on the table beginning with the 1996 retirements of 1991 installations and ending with the 2005 retirements of the 2000 installations. Thus, the total amount of 143 for age interval 4½-5½ equals the sum of:

$$10 + 12 + 13 + 11 + 13 + 13 + 15 + 17 + 19 + 20$$
.

In Table 2, other transactions which affect the group are recorded in a similar manner. The entries illustrated include transfers and sales. The entries which are credits to the plant account are shown in parentheses. The items recorded on this schedule are

TABLE 1. RETIREMENTS FOR EACH YEAR 1996-2005 SUMMARIZED BY AGE INTERVAL

Experience Band 1996-2005

Placement Band 1991-2005

		4		Retireme			of Dolla	rs				
Year					Durir	<u>ng Year</u>					Total During	Age
<u>Placed</u>	<u> 1996</u>	<u> 1997</u>	<u> 1998</u>	<u> 1999</u>	<u>2000</u>	2001	2002	2003	<u>2004</u>	2005	Age Interval	Interval
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1991	10	11	12	13	14	16	23	24	25	26	26	131/2-141/2
1992	11	12	13	. 15	16	18	20	21	22	19	44	121/2-131/2
1993	11	12	13	14	16	17	19	21	22	18	64	11½-12½
1994	8	9 ່	10	11	11	13	14	15	16	17	83	101/2-111/2
1995	9	10	11	12	13	14	16	17	19	20	93	91/2-101/2
1996	4	9	10	11	12	13	14	15	16	20	105	81/2-91/2
1997		5	11	12	13	14	15	16	18	20	113	71/2-81/2
1998			6	12	13	15	16	17	19	19	124	61/2-71/2
1999				6	13	15	16	17	19	19	131	51/2-61/2
2000					7	14	16	17	19	20	143	41/2-51/2
2001						8	18	20	22	23	146	31/2-41/2
2002							9	20	22	25	150	21/2-31/2
2003								11	23	25	151	11/2-21/2
2004									11	24	153	1/2-11/2
2005	_	_		_						<u>13</u>	80	0-1/2
Total	<u>53</u>	<u>68</u>	<u>86</u>	<u>106</u>	<u>128</u>	<u>157</u>	<u>196</u>	<u>231</u>	<u>273</u>	<u>308</u>	<u>1,606</u>	

TABLE 2. OTHER TRANSACTIONS FOR EACH YEAR 1996-2005 SUMMARIZED BY AGE INTERVAL

Experience Band 1996-2005

Placement Band 1991-2005

			Acquisitio	ons, Trai	<u>nsfers, a</u>	nd Sale	s, Thousa	nds of Do	llars			
Year					Du	ring Yea	ar				Total During	Age
<u>Placed</u>	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Age Interval	<u>Interval</u>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1991	_	_	_	-	_	-	60a	-	-	-	-	13½-14½
1992	~		-	-	-	-	~	-	-	-	-	12½-13½
1993	-	-	-	-	-	-	-	-	-	-	•	11½-12½
1994	-	_	-	-	-	-	-	(5)b	-	-	60	10½-11½
1995	-	-	-	-	-	-	-	6 a	-	-	-	91/2-101/2
1996		-	-	-	_	-	-	-	-	-	(5)	81/2-91/2
1997		-	-	-	-	-	-	-	-	-	6	71/2-81/2
1998			-	-	-	-	-	-	-	-	-	61/2-71/2
1999				-	-	-	-	(12)b	-	-	-	5½-6½
2000					-	-	<u>.</u> -	-	22a	-	-	41/2-51/2
2001						-	; -	(19)b	-	-	10	31/2-41/2
2002							-	-	-	-	-	21/2-31/2
2003								-	-	(102) ^C	(121)	11/2-21/2
2004									-	-	-	1/2-11/2
2005		-		antana.			-	_	_	-	<u></u>	0-1/2
Total	-	-	-	÷	-	-	<u>60</u>	(<u>30</u>)	<u>22</u>	(<u>102</u>)	(<u>50</u>)	

a Transfer Affecting Exposures at Beginning of Year.b Transfer Affecting Exposures at End of Year.

c Sale with Continued Use.

Parentheses denote Credit amount.

not totaled with the retirements, but are used in developing the exposures at the beginning of each age interval.

Schedule of Plant Exposed to Retirement. The development of the amount of plant exposed to retirement at the beginning of each age interval is illustrated in Table 3 on page II-15.

The surviving plant at the beginning of each year from 1996 through 2005 is recorded by year in the portion of the table headed "Annual Survivors at the Beginning of the Year." The last amount entered in each column is the amount of new plant added to the group during the year. The amounts entered in Table 3 for each successive year following the beginning balance or addition are obtained by adding or subtracting the net entries shown on Tables 1 and 2. For the purpose of determining the plant exposed to retirement, transfers-in are considered as being exposed to retirement in this group at the beginning of the year in which they occurred, and the sales and transfers-out are considered to be removed from the plant exposed to retirement at the beginning of the following year. Thus, the amounts of plant shown at the beginning of each year are the amounts of plant from each placement year considered to be exposed to retirement at the beginning of each successive transaction year. For example, the exposures for the installation year 2001 are calculated in the following manner:

```
Exposures at age 0 = amount of addition = $750,000 Exposures at age \frac{1}{2} = $750,000 - $8,000 = $742,000 Exposures at age \frac{1}{2} = $742,000 - $18,000 = $724,000 Exposures at age \frac{2}{2} = $724,000 - $20,000 - $19,000 = $685,000 Exposures at age \frac{3}{2} = $685,000 - $22,000 = $663,000
```

For the entire experience band 1996-2005, the total exposures at the beginning of an age interval are obtained by summing diagonally in a manner similar to the summing

TABLE 3. PLANT EXPOSED TO RETIREMENT JANUARY 1 OF EACH YEAR 1996-2005 SUMMARIZED BY AGE INTERVAL

Experience Band 1996-2005

Placement Band 1991-2005

				Anr			usands of e Beginnir		Year			Total at Beginning	
	Year	4000	1007				2001	2002	2003	2004	2005	of Age Interval	Age <u>Interval</u>
	Placed (1)	<u>1996</u> (2)	<u>1997</u> (3)	<u>1998</u> (4)	<u>1999</u> (5)	<u>2000</u> (6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	1991	25 5	245	234	222	209	195	239	216	192	167	167	13½-14½
	1992	279	268	256	243	228	212	194	174	153	131	323	12½-13½
	1993	307	296	284	271	257	241	224	205	184	162	531	11½-12½
Ξ	1994	33 8	330	321	311	300	289	276	262	242	226	823	10½-11½
5	1995	37 6	367	357	346	334	321	307	297	280	261	1,097	9½-10½
	1996	42 0 ^a	416	407	397	386	374	361	347	332	316	1,503	81/2-91/2
	1997		460°	455	444	432	419	405	390	374	356	1,952	71/2-81/2
	1998			510 ^a	504	492	479	464	448	431	412	2,463	61/2-71/2
	1999			•	580°	574	561	546	530	501	482	3,057	51/2-61/2
	2000					660°	653	639	623	628	609	3,789	41/2-51/2
	2001						750°	742	724	685	663	4,332	31/2-41/2
	2002							850°	841	821	799	4,955	21/2-31/2
	2003								960°	949	926	5,719	11/2-21/2
	2004									1,080 ^a	1,069	6,579	1/2-11/2
	2005	************	***************************************				******		***		<u>1,220</u> °	<u>7,490</u>	0-1/2
	Total	<u>1,975</u>	2,382	2,824	<u>3,318</u>	3,872	<u>4,494</u>	<u>5,247</u>	<u>6,017</u>	<u>6,852</u>	<u>7,799</u>	<u>44,780</u>	

^a Additions during the year.

of the retirements during an age interval (Table 1). For example, the figure of 3,789, shown as the total exposures at the beginning of age interval 4½-5½, is obtained by summing:

Original Life Table. The original life table, illustrated in Table 4 on page II-17, is developed from the totals shown on the schedules of retirements and exposures, Tables 1 and 3, respectively. The exposures at the beginning of the age interval are obtained from the corresponding age interval of the exposure schedule, and the retirements during the age interval are obtained from the corresponding age interval of the retirement schedule. The retirement ratio is the result of dividing the retirements during the age interval by the exposures at the beginning of the age interval. The percent surviving at the beginning of each age interval is derived from survivor ratios, each of which equals one minus the retirement ratio. The percent surviving is developed by starting with 100% at age zero and successively multiplying the percent surviving at the beginning of each interval by the survivor ratio, i.e., one minus the retirement ratio for that age interval. The calculations necessary to determine the percent surviving at age 5½ are as follows:

```
Percent surviving at age 4\frac{1}{2} = 88.15

Exposures at age 4\frac{1}{2} = 3,789,000

Retirements from age 4\frac{1}{2} to 5\frac{1}{2} = 143,000

Retirement Ratio = 143,000 ÷ 3,789,000 = 0.0377

Survivor Ratio = 1.000 - 0.0377 = 0.9623

Percent surviving at age 5\frac{1}{2} = (88.15) x (0.9623) = 84.83
```

The totals of the exposures and retirements (columns 2 and 3) are shown for the purpose of checking with the respective totals in Tables 1 and 3. The ratio of the total retirements to the total exposures, other than for each age interval, is meaningless.

TABLE 4. ORIGINAL LIFE TABLE CALCULATED BY THE RETIREMENT RATE METHOD

Experience Band 1996-2005

Placement Band 1991-2005

(Exposure and Retirement Amounts are in Thousands of Dollars)

Age at Beginning of Interval (1)	Exposures at Beginning of Age Interval (2)	Retirements During Age Interval (3)	Retirement Ratio (4)	Survivor Ratio (5)	Percent Surviving at Beginning of Age Interval (6)
0.0	7,490	80	0.0107	0.9893	100.00
0.5	6,579	153	0.0233	0.9767	98.93
1.5	5,719	151	0.0264	0.9736	96.62
2.5	4,955	150	0.0303	0.9697	94.07
3.5	4,332	146	0.0337	0.9663	91.22
4.5	3,789	143	0.0377	0.9623	88.15
5.5	3,057	131	0.0429	0.9571	84.83
6.5	2,463	124	0.0503	0.9497	81.19
7.5	1,952	113	0.0579	0.9421	77.11
8.5	1,503	105	0.0699	0.9301	72.65
9.5	1,097	93	0.0848	0.9152	67.57
10.5	823	83	0.1009	0.8991	61.84
11.5	531	64	0.1205	0.8795	55.60
12.5	323	44	0.1362	0.8638	48.90
13.5	<u> 167</u>	<u>26</u>	0.1557	0.8443	42.24
					35.66
Total	44,780	<u>1,606</u>			

Column 2 from Table 3, Column 12, Plant Exposed to Retirement.

Column 3 from Table 1, Column 12, Retirements for Each Year.

Column 4 = Column 3 divided by Column 2.

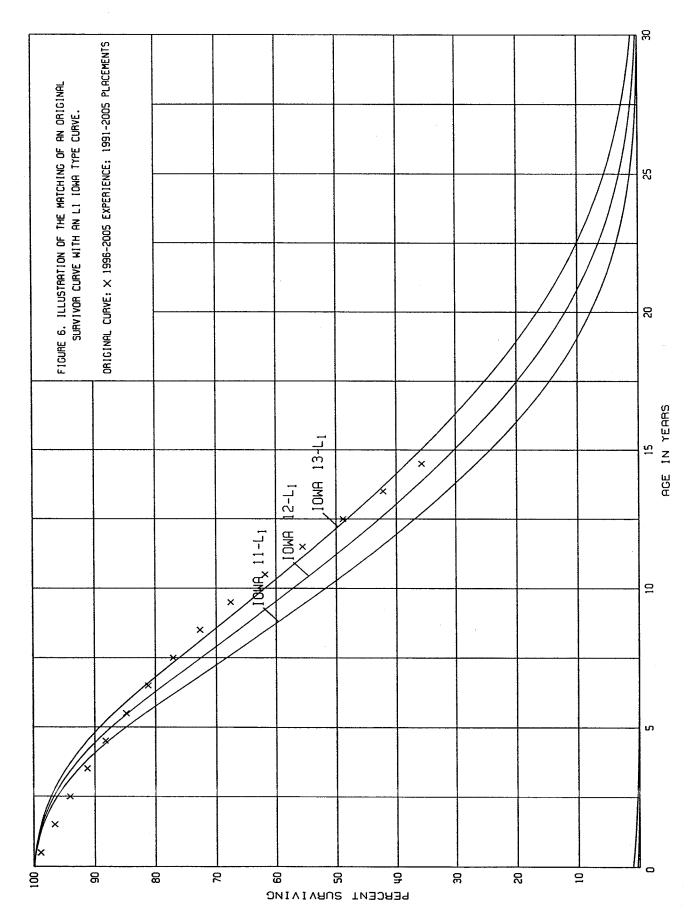
Column 5 = 1.0000 minus Column 4.

Column 6 = Column 5 multiplied by Column 6 as of the Preceding Age Interval.

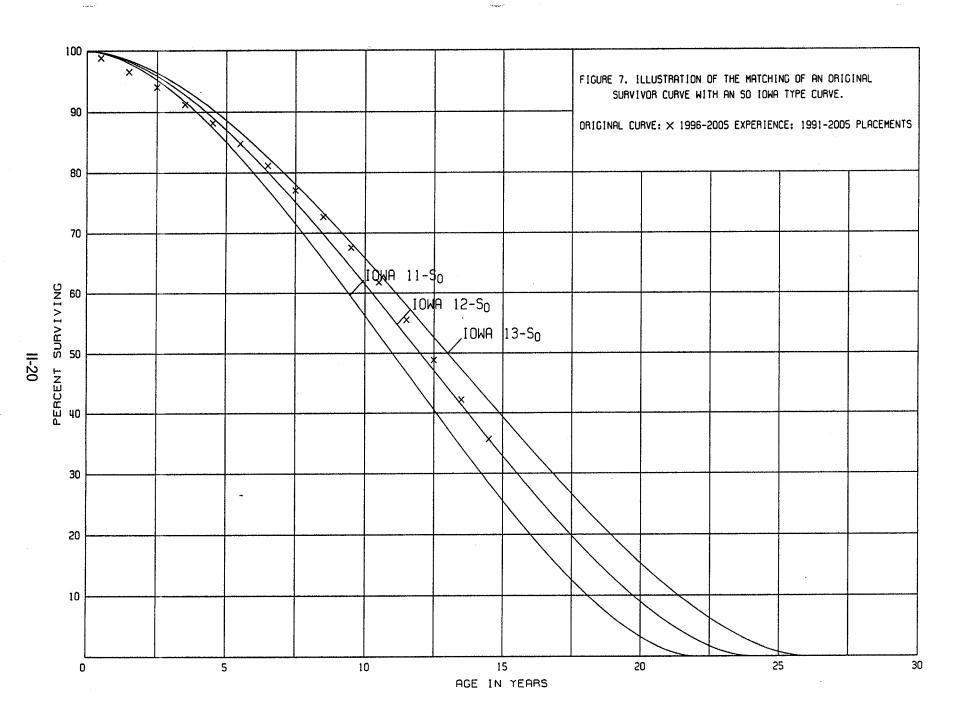
The original survivor curve is plotted from the original life table (column 6, Table 4). When the curve terminates at a percent surviving greater than zero, it is called a stub survivor curve. Survivor curves developed from retirement rate studies generally are stub curves.

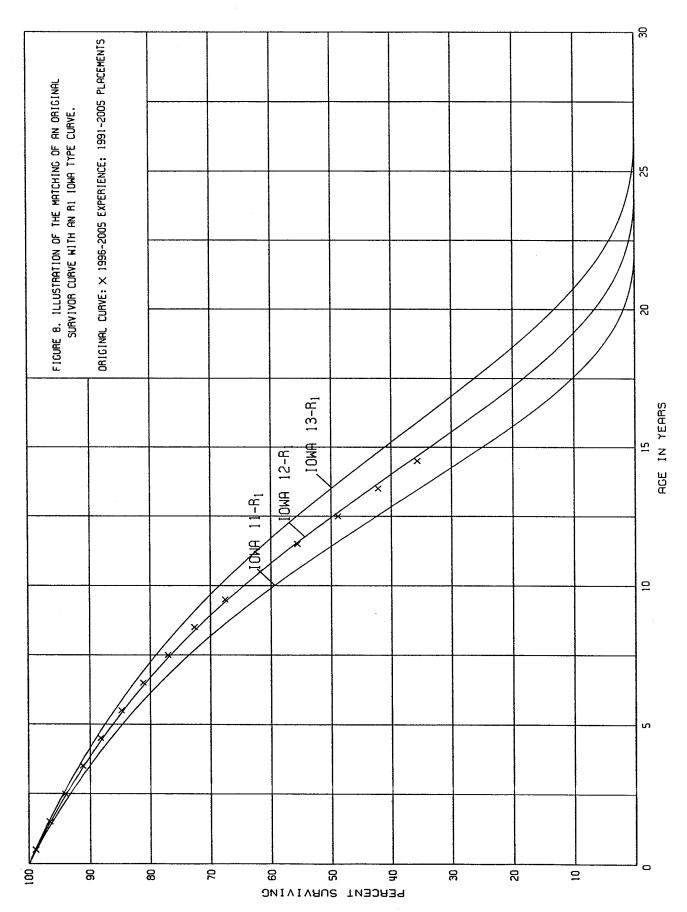
Smoothing the Original Survivor Curve. The smoothing of the original survivor curve eliminates any irregularities and serves as the basis for the preliminary extrapolation to zero percent surviving of the original stub curve. Even if the original survivor curve is complete from 100% to zero percent, it is desirable to eliminate any irregularities, as there is still an extrapolation for the vintages which have not yet lived to the age at which the curve reaches zero percent. In this study, the smoothing of the original curve with established type curves was used to eliminate irregularities in the original curve.

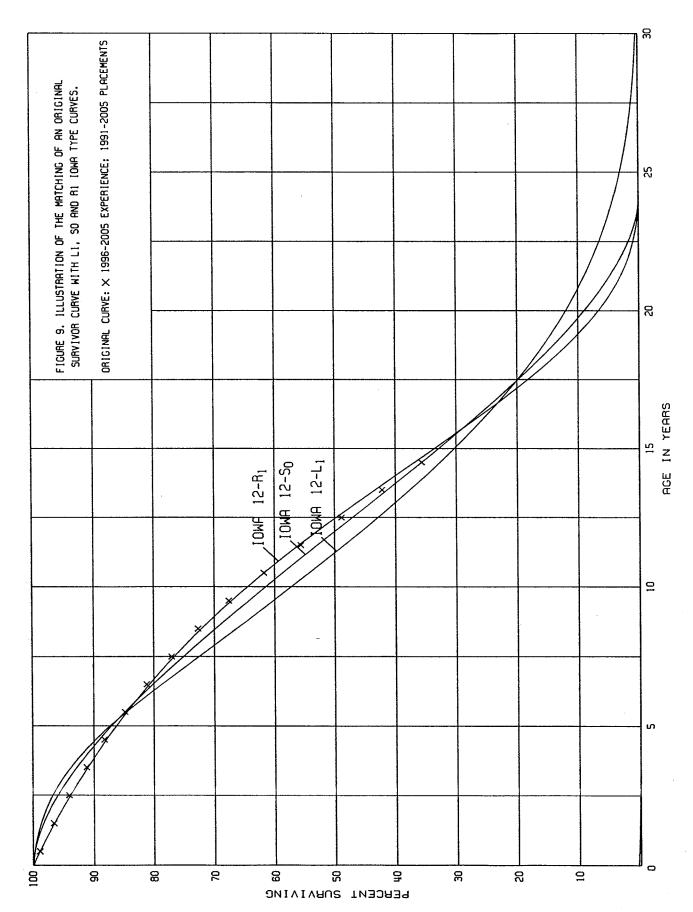
The lowa type curves are used in this study to smooth those original stub curves which are expressed as percents surviving at ages in years. Each original survivor curve was compared to the lowa curves using visual and mathematical matching in order to determine the better fitting smooth curves. In Figures 6, 7, and 8, the original curve developed in Table 4 is compared with the L, S, and R lowa type curves which most nearly fit the original survivor curve. In Figure 6, the L1 curve with an average life between 12 and 13 years appears to be the best fit. In Figure 7, the S0 type curve with a 12-year average life appears to be the best fit and appears to be better than the L1 fitting. In Figure 8, the R1 type curve with a 12-year average life appears to be the best fit and appears to be better than either the L1 or the S0. In Figure 9, the three fittings, 12-L1, 12-S0 and 12-R1 are drawn for comparison purposes. It is probable that the 12-R1 lowa curve would be selected as the most representative of the plotted survivor characteristics of the group, assuming no contrary relevant factors external to the analysis of historical data.



17:5







Service Life Considerations

The service life estimates were based on judgment which considered a number of factors. The primary factors were the statistical analyses of data; current company policies and outlook as determined during field reviews of the property and other conversations with management; and the survivor curve estimates from previous studies of this company and other gas and thermal companies.

Field Trip

A field review was conducted on March 15 and 16, 2006. The facilities visited included the following:

March 15, 2006

Perry K. Plant West St. Chilled Water Plant Indianapolis Campus Energy (ICE) Plant Illinois Street Plant

March 16, 2006

South LNG Facility
Smith Valley City Gate (South)
Transmission Regulating Station - TR-13
Langsdale Regulating Station - TR-6
North LNG Facility
Langsdale Operations Center

For the majority of the accounts and subaccounts, the statistical analysis resulted in good to excellent indications of complete survivor patterns. These accounts represent 88% of the depreciable gas plant (other than Westfield) and 37% of the depreciable steam plant. The survivor curve estimates for the balance of the depreciable property of the gas and steam divisions, the chilled water division and Citizens Gas of Westfield were based on judgment which incorporated the estimates for the Company's gas operations and estimates used by other gas and thermal companies for similar property.

The information external to the statistics led to no significant departure from the survivor curves indicated by the historical data for the accounts listed below:

Account No.

Account Description

GAS OPERATIONS/CSS

319.0	Pressure Regulating Equipment
350.2	Leaseholds
351.0	Structures & Improvements
352.0	Wells
353.0	Lines
356.0	Purification Equipment
357.0	Other Equipment
363.4	Measuring & Regulating Equipment
366.0 & 366.1	Structures & Improvements
367.0 & 367.1	Mains
368.0	Compressor Station Equipment
369.0 & 369.01	Measuring & Regulating Equipment
370.0	Communication Equipment
375.0	Structures & Improvements
376.10	Mains - Valves, Valve Pits, Etc.
376.20	Mains - Steel Installed Prior to 1955
376.21	Mains - Steel and Plastic Installed Subsequent to 1954
376.70	Mains - Cast Iron & Wrought Iron
378.0	Measuring & Regulating Equipment
380.0	Services
381.0 & 382.0	Meters and Meter Installations
383.0 & 384.0	House Regulators & House Regulator Installations
387.0	Other Equipment
392.1	Transportation Equipment
396.1	Power Operated Equipment

THERMAL - STEAM

602.0	Mains
603.0	Services
604.0	Meters

The two largest accounts, 376.21 and 380.00, are used to illustrate the manner in which the study was conducted for the accounts in the preceding list. Aged plant accounting data have been compiled for the years 1955 through 2005 for Account 376.21

and for the years 1954 to 2005 for Account 380.0. These data have been coded according to account or property group, type of transaction, year in which the transaction took place and year in which the utility plant was placed in service. The retirements, other plant transactions and plant additions were analyzed by the retirement rate method.

The survivor curve estimate for 376.21, Mains - Steel Installed Subsequent to 1954, is the 65-R2 and is based on the statistical indication for the period 1955 through 2005. The 65-R2 is a reasonable fit of the significant portion of the original survivor curve as set forth on page III-60, consistent with the prior estimate and management outlook for a continuation of the historical experience, and within the typical service life range of 60 to 75 years for mains.

The survivor curve estimate for 380.00, Services, is the 35-R2.5 and is based on the statistical indication for the period 1954 through 2005. The 35-R2.5 is an excellent fit of the significant portion of the original survivor curve as set forth on page III-72; consistent with management outlook for a continuation of historical experience; and within the typical service life range of 30-50 years for services.

The survivor curve estimates for the remaining accounts were based on judgment incorporating the statistical analyses and previous studies for this and other gas utilities.

Salvage Analysis

The estimates of net salvage were based in part on historical data compiled for the years 1960 through 2005. Cost of removal and salvage were expressed as percents of the original cost of plant retired, both on annual and three-year moving average bases. The most recent five-year average also was calculated for consideration. The net salvage estimates are expressed as a percent of the original cost of plant retired.

Net Salvage Considerations

The estimates of salvage were based primarily on judgment which considered a number of factors. The primary factors were the analyses of historical data, a knowledge of management's plans and operating policies, and net salvage estimates from previous studies of this company and other gas and thermal companies. The accounts for which the historical analyses were representative of expectations for future net salvage levels represent 89 percent of the depreciable gas plant balance (excluding Westfield) and are presented below:

305.3	Structures and Improvements
319.00	Pressure Regulating Equipment
350.2 thru 357.0	Underground Storage
363.4	Measuring & Regulating Equipment
366.0 & 366.1	Structures and Improvements
367.0 & 367.1	Mains
368.0	Compressor Station Equipment
369.0 & 369.1	Measuring & Regulating Equipment
375.00	Structures and Improvements
376.00	Mains
378.00	Measuring & Regulating Equipment
380.00	Services
381.00	Meters
382.0	Meter Installations
383.0	House Regulators
384.0	House Regulator Installations
390.00	Structures and Improvements
392.1	Transportation Equipment
396.1	Power Operated Equipment

Historical data were not available for Thermal plant and Citizens Gas of Westfield.

Account 376.00, Mains, is used to illustrate the manner in which the study was conducted for the accounts in the preceding list. Depreciation reserve accounting data were compiled for the years 1960 through 2005. These data include the retirements, cost of removal and gross salvage.

The net salvage estimate for this account is negative 50 percent and is based on the trends in cost of removal and salvage percents as shown in the tabulation on pages III-129 through III-131. Cost of removal as a percent of the original cost retired has fluctuated during the experience. The most recent three- and five-year bands averaged 54 and 51 percent removal cost, respectively. Gross salvage has been zero since 1972. The negative 50 percent net salvage estimate is primarily based on the five-year average cost of removal percent and the recent trend in the account.

Amortization accounting is proposed for certain General Plant accounts which represent 3 percent of depreciable property. Future gross salvage and removal cost for these accounts will be recorded as revenue and expense, respectively. Inasmuch as there will be no depreciation reserve entries related to salvage, the estimate of net salvage for accounts subject to amortization is zero percent.

CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

After the survivor curve and salvage are estimated, the annual depreciation accrual rate can be calculated. In the average service life procedure, the annual accrual rate is computed by the following equation:

Annual Accrual Rate,
$$Percent = \frac{(100\% Net Salvage, Percent)}{Average Service Life}$$

The calculated accrued depreciation for each depreciable property group represents that portion of the depreciable cost of the group which will not be allocated to expense through future depreciation accruals, if current forecasts of life characteristics are used as a basis for straight line depreciation accounting.

The accrued depreciation calculation consists of applying an appropriate ratio to the surviving original cost of each vintage of each account, based upon the attained age and the estimated survivor curve. The accrued depreciation ratios are calculated as follows:

The application of these procedures is described for a single unit of property and a group of property units. Salvage is omitted from the description for ease of application.

Single Unit of Property

The calculation of straight line depreciation for a single unit of property is straightforward. For example, if a \$1,000 unit of property attains an age of four years and has a life expectancy of six years, the annual accrual over the total life is:

$$\frac{\$1,000}{(4+6)}$$
 = \\$100 per year.

The accrued depreciation is:

$$$1,000 (1 - \frac{6}{10}) = $400.$$

Group Depreciation Procedures

When more than a single item of property is under consideration, a group procedure for depreciation is appropriate because normally all of the items within a group do not have identical service lives, but have lives that are dispersed over a range of time. There are two primary group procedures, namely, average service life and equal life group.

Average Service Life Procedure. In the average service life procedure, the rate of annual depreciation is based on the average service life of the group, and this rate is applied to the surviving balances of the group's cost. The accrued depreciation is based on the average service life of the group and the average remaining life of each vintage within the group derived from the area under the survivor curve between the attained age of the vintage and the maximum age.

Equal Life Group Procedure. In the equal life group procedure, also known as the unit summation procedure, the property group is subdivided according to service life. That is, each equal life group includes that portion of the property which experiences the life of that specific group. The relative size of each equal life group is determined from the property's life dispersion curve. The calculated depreciation for the property group is the summation of the calculated depreciation based on the service life of each equal life unit.

The table on the following page presents an illustration of calculation of equal life group depreciation using the lowa 9-L3 survivor curve, net salvage of 15 percent and a December 31, 2005 calculation date.

In the table, each equal life group is defined by the age interval shown in columns 1 and 2. These are the ages at which the first and last retirement of each group occur, and the group's equal life, shown in column 3, is the midpoint of the interval. For purposes of the calculation, the computer is programmed to divide each vintage into equal life groups arranged so that the midpoint of each one-year age interval coincides with the calculation date, e.g., December 31 in this case. This enables the calculation of annual accruals for a twelve-month period centered on the date of calculation.

DETAILED COMPUTATION OF ANNUAL AND ACCRUED FACTORS USING THE EQUAL LIFE GROUP PROCEDURE

INPUT PARAMETERS:

CALCULATION DATE.. 12-31-2005 SURVIVOR CURVE.... 9-L3 NET SALVAGE, PCT.. +15

RETIREMENTS GROUP						SUMMATION	AVERAGE		
	TERVAL		DURING	ANNUAL	YEAR	OF ANNUAL	PERCENT	ANNUAL	ACCRUED
BEG	END	LIFE	INTERVAL	ACCRUAL	INST	ACCRUALS	SURVIVING	FACTOR	FACTOR
(1)	(2)	(3)	(4)	(5)=(4)/(3)	(6)	(7)	(8)	(9)	(10)
0.000	1.000	0.500	0.00124	0.00105400000	2005	10.70745019488	99,999879	0.1071	0.0536
1.000	2.000	1.500	0.13711	0.07769566667	2004	10.66754836154	99.930204	0.1067	0.1601
2.000	3.000	2.500	0.72152	0.24531680000	2003	10.50604212821	99.500889	0.1056	0.2640
3.000	4.000	3.500	1.79062	0.43486485714	2002	10.16595129964	98.244818	0.1035	0.3623
4.000	5.000	4.500	3.72259	0.70315588889	2001	9.59694092662	95,488214	0.1005	0.4523
5.000	6.000	5.500	7.46676	1.15395381818	2000	8.66838607309	89.893543	0.0964	0.5302
6.000	7.000	6.500	12.30649	1.60931023077	1999	7.28675404861	80.006919	0.0911	0.5922
7.000	8.000	7.500	15.29687	1.73364526667	1998	5.61527629989	66.205238	0.0848	0.6360
8.000	9.000	8.500	14.74260	1.47426000000	1997	4.01132366656	51.185501	0.0784	0.6664
9.000	10.000	9.500	11.89325	1.06413289474	1996	2.74212721919	37.867574	0.0724	0.6878
10.000	11.000	10.500	8.87915	0.71878833333	1995	1.85066660515	27.481372	0.0673	0.7067
11.000	12.000	11.500	6.68114	0.49382339130	1994	1.24436074284	19.701231	0.0632	0.7268
12.000	13.000	12.500	5.17978	0.35222504000	1993	0.82133652719	13.770774	0.0596	0.7450
13.000	14.000	13.500	3.99911	0.25179581481	1992	0.51932609978	9.181326	0.0566	0.7641
14.000	15.000	14.500	2.94559	0.17267251724	1991	0.30709193376	5.708977	0.0538	0.7801
15.000	16.000	15.500	2.00554	0.10998122581	1990	0.16576506223	3.233413	0.0513	0.7952
16.000	17.000	16.500	1.22554	0.06313387879	1989	0.07920750993	1.617873	0.0490	0.8085
17.000	18.000	17.500	0.64484	0.03132080000	1988	0.03198017054	0.682682	0.0468	0.8190
18.000	19.000	18.500	0.27121	0.01246100000	1987	0.01008927054	0.224655	0.0449	0.8307
19.000	20.000	19.500	0.07838	0.00341656410	1986	0.00215048849	0.049857	0.0431	0.8405
20.000	21.000	20.500	0.01052	0.00043619512	1985	0.00022410888	0.005409	0.0414	0.8487
21.000	21.420	21.210	0.00015	0.00000601132	1984	0.00000126238	0.000032	0.0394	0.8500

TOTAL 100.00000

NOTE: In the application of the annual and accrued factors, zero percent net salvage is used in the above computations and the adjustment is made when the factors are applied to the surviving costs.

The retirement during the age interval, shown in column 4, is the size of each equal life group, and is derived from the Iowa 9-L3 survivor curve. It is the difference between the percents surviving at the beginning and end of the age interval.

Each equal life group's annual accrual, shown in column 5, equals the group's size (column 4) divided by its life (column 3) and multiplied by the quantity one minus the net salvage percent with the exception of 2005 installations. For 2005 installations, the group annual accrual is equal to the retirements during the interval multiplied by one minus the net salvage percent.

Columns 6 through 10 show the derivation of the annual factor and accrued factor for each vintage based on the information developed in the first five columns. The year installed is shown in column 6. For all vintages other than 2005, the summation of annual accruals for each year installed, shown in column 7, is calculated by adding one-half of the group annual accrual (column 5) for that vintage's current age interval plus the group annual accruals for all succeeding age intervals. For example, the figure 10.66754836154 for 2004 equals one-half of 0.07769566667 plus all of the succeeding figures in column 5. Only one-half of the annual accrual for the vintage's current age interval group is included in the summation because the equal life group for that interval has reached the year during which it is expected to be retired.

The summation of annual accruals (column 7) for installations during 2005 are calculated on the basis of an in-service date at the midpoint of the year, i.e., June 30. Inasmuch as the overall calculation is centered on December 31, 2005, the first figure in column 7, for vintage 2005, equals all of the group annual accrual for the first equal life group plus the accruals for all of the subsequent equal life groups.

The average percent surviving, derived from the lowa 9-L3 survivor curve, is shown in column 8 for each age interval. The annual factor, shown in column 9, is the result of dividing the summation of annual accruals (column 7) by the average percent surviving (column 8).

The accrued factor, shown in column 10, equals the annual factor multiplied by the age of the group at December 31, 2005.

REMAINING LIFE ANNUAL ACCRUAL RATES

The annual depreciation accrual rates are calculated as of December 31, 2005, and based on the straight line remaining life method using the equal life group procedure. For

the purpose of calculating the composite remaining life accrual rates as of December 31, 2005, the book reserve for each plant account is allocated among vintages in proportion to the calculated accrued depreciation for the account as of December 31, 2005. The remaining life annual accrual for each vintage is determined by dividing future book accruals (original cost less book reserve) by the composite remaining life for the surviving original cost of that vintage. The composite remaining life is derived by compositing the individual equal life group remaining lives in accordance with the following equation:

Composite Remaining Life =
$$\frac{\frac{Book \ Cost}{Life} \ x \ Remaining \ Life}{\frac{Book \ Cost}{Life}}$$

The book costs and lives of the several equal life groups which are summed in the foregoing equation are defined by the estimated future survivor curve.

Inasmuch as book cost divided by life equals the whole life annual accrual, the foregoing equation reduces to the following form:

or

The composite remaining life calculations were made using computer software that utilizes detailed ELG calculations of whole life future accruals and annual accruals in order to derive the vintage composite remaining lives for the ELG vintages. The annual accrual rate

for each account is equal to the sum of the remaining life annual accruals divided by the total original cost. The composite remaining life is calculated by dividing the sum of the future book accruals by the sum of the remaining life annual accruals.

CALCULATION OF ANNUAL AND ACCRUED AMORTIZATION

Amortization is the gradual extinguishment of an amount in an account by distributing such amount over a fixed period over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized. Normally, the distribution of the amount is in equal amounts to each year of the amortization period.

The calculation of annual and accrued amortization requires the selection of an amortization period. The amortization periods used in this report were based on judgment which incorporated a consideration of the period during which the assets will render most of their service, the amortization period and service lives used by other utilities and the service life estimates previously used for the asset under depreciation accounting.

Amortization accounting is used for certain General Plant accounts that represent numerous units of property, but a very small portion of depreciable utility plant in service.

The accounts and their amortization periods are as follows:

	Account	Amortization Period, <u>Years</u>
391.10	Office Furniture	25
391,20	Office Machines	15
391.30	Computer Equipment	5
393.00	Stores Equipment	30
394.00	Tools, Shop, Garage Equipment	20
395.00	Laboratory Equipment	15
397.00	Communication Equipment	15
398.00	Miscellaneous Equipment	20

The calculated accrued amortization is equal to the original cost multiplied by the ratio of the vintage's age to its amortization period. The annual amortization amount is determined by dividing the original cost by the period of amortization for the account.

PART III. RESULTS OF STUDY

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PART III. RESULTS OF STUDY

111-1

PART III. RESULTS OF STUDY

QUALIFICATION OF RESULTS

The calculated annual and accrued depreciation are the principal results of the study. Continued surveillance and periodic revisions are normally required to maintain continued use of appropriate annual depreciation accrual rates. An assumption that accrual rates can remain unchanged over a long period of time implies a disregard for the inherent variability in service lives and salvage and for the change of the composition of property in service. The annual accrual rates were calculated in accordance with the straight line remaining life method of depreciation using the equal life group procedure based on estimates which reflect considerations of current historical evidence and expected future conditions.

The annual depreciation accrual rates are applicable specifically to the utility plant in service as of December 31, 2005. For most plant accounts, the application of such rates to future balances that reflect additions subsequent to December 31, 2005, is reasonable for a period of three to five years.

DESCRIPTION OF STATISTICAL SUPPORT

The service life and salvage estimates were based on judgment which incorporated statistical analyses of retirement data, discussions with management and consideration of estimates made for other gas and thermal utility companies. The results of the statistical analyses of service life are presented in the section titled "Service Life Statistics".

The estimated survivor curve for those accounts where the historical data was a significant factor in the survivor curve estimate are presented in graphical form. The charts depict the estimated smooth survivor curve and original survivor curve related to each

specific group. The original life table is also presented in tabular form for each specific group.

The net salvage analysis is for each specific group where the historical data were a significant factor in the estimated net salvage percent are presented in the section titled "Net Salvage Statistics". The tabulations present annual cost of removal and salvage data, three-year moving averages and the most recent five-year average. Data are shown in dollars and as percentages of original costs retired.

DESCRIPTION OF DEPRECIATION TABULATIONS

Summaries of the results of the study, as applied to the original cost of utility plant at December 31, 2005 for the Gas Operations/CSS, Thermal and Citizens Gas of Westfield are presented in Schedules 1, 2 and 3, respectively, on pages III-4 to III-10 of this report. The summary schedules set forth the estimated survivor curve and net salvage percent, original cost, book depreciation reserve, future accruals, calculated annual depreciation accrual amount, calculated annual depreciation accrual rate, and the remaining life for each depreciable group.

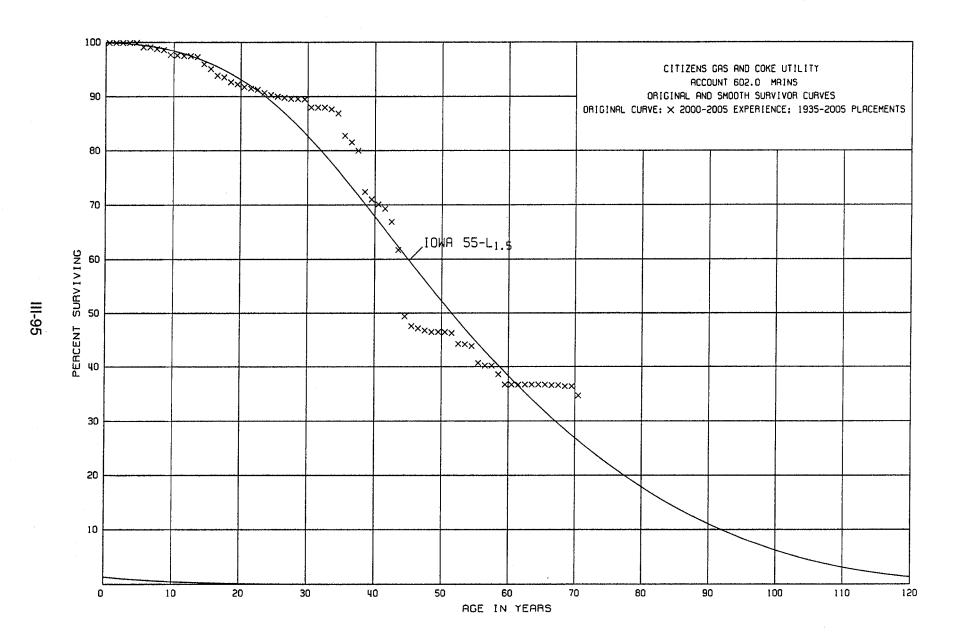
SCHEDULE 2. SUMMARY OF SERVICE LIFE AND NET SALVAGE ESTIMATES AND CALCULATED REMAINING LIFE ACCRUALS AS OF DECEMBER 31, 2005

ACCT.	DESCRIPTION	SURVIVOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST AT DECEMBER 31, 2005	BOOK RESERVE	FUTURE ACCRUALS	ANNUAL ACCRUAL AMOUNT	ACCRUAL RATE, PERCENT	COMPOSITE REMAINING LIFE
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	STEAM								
	DEPRECIABLE PLANT								
311.0 312.0 314.0 315.0 316.0	PRODUCTION PLANT Structures & Improvements Boiler Plant Equipment Turbogenerator Units Accessory Electric Equipment Miscellaneous Power Plant Equipment TOTAL PRODUCTION PLANT	75 - S1 65 - R2 55 - R2 50 - R2 50 - R2	• 0 • 0 • 0	3,103,902.74 9,678,094.62 2,162,215.85 1,103,611.24 183,962.72 16,231,787.17	228,292 840,266 104,720 146,539 13,967	2,875,608 8,837,828 2,057,496 957,072 169,995	154,717 494,512 125,884 57,971 10,285 843,369	4.98 5.11 5.82 5.25 5.59	18.6 17.9 16.3 16.5 16.5
600.0 602.0 603.0 604.0	DISTRIBUTION PLANT Land Rights Mains Services Meters TOTAL DISTRUBUTION PLANT	65 - R3 55 - L1.5 40 - L0.5 40 - R2.5	0 (5) (10) 0	1,792.46 9,102,115.44 1,107,411.48 522,548.30 10,733,667.68	261 782,795 87,038 47,461 917,555	1,531 8,774,426 1,131,112 475,086 10,382,155	49 282,053 52,667 20,607 355,376	2.73 3.10 4.76 3.94	31.2 31.1 21.5 23.1
	GENERAL PLANT								
391.1 391.2 391.3 391.3	Office Furniture and Machines Office Furniture Office Equipment Computer Equipment & Software Software Total Office Furniture and Machines	25 - SQ 15 - SQ 5 - SQ 5 - SQ	0 0 0	75,337.60 6,370.00 501,971.62 321,212.18 904,891.40	5,615 424 55,407 22,143 83,589	69,724 5,946 446,565 299,069 821,304	5,330 517 140,635 81,548 228,030	7.07 8.12 28.02 25.39	13.1 11.5 3.2 3.7
392.0 393.0 394.0 395.0 396.0 397.0 398.0	Transportation Equipment Stores Equipment Tools, Shop, Garage Equipment Laboratory Equipment Power Operated Equipment Communication Equipment Miscellaneous Equipment TOTAL GENERAL PLANT	9 - L3 30 - SQ 20 - SQ 15 - SQ 14 - L1.5 15 - SQ 20 - SQ	15 0 0 0 20 0	552,544.37 17,056.54 205,181.41 17,129.29 311,921.05 123,327.76 112,527.50 2,244,579.32	42,159 693 29,363 1,319 17,790 7,570 10,459	427,503 16,363 175,819 15,810 231,748 115,758 102,069 1,906,374	90,433 710 28,475 1,490 29,044 10,020 8,462 396,664	16.37 4.16 13.88 8.70 9.31 8.12 7.52	4.7 23.0 6.2 10.6 8.0 11.6 12.1
	TOTAL DEPRECIABLE PLANT			29,210,234.17	2,444,281	27,186,528	1,595,409		
310.0	NONDEPRECIABLE PLANT Land			47,846.87					
	TOTAL STEAM DIVISION			29,258,081.04	2,444,281	27,186,528	1,595,409		

^{*} Life span technique is used. Curve shown is interim survivor curve.

111-94

THERMAL - STEAM



ACCOUNT 602.0 MAINS

ORIGINAL LIFE TABLE

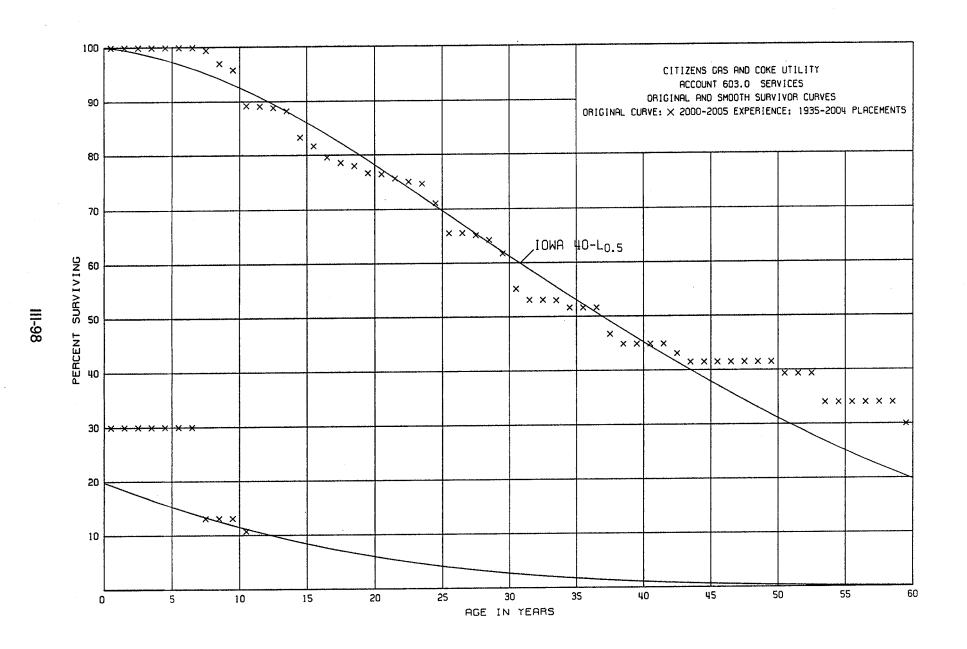
PLACEMENT	BAND 1935-2005		EXPERIENC	CE BAND	2000-2005
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENT DURING AGE INTERVAL		SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5	2,174,052 867,783 769,575 803,774 867,979		0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000	100.00 100.00 100.00 100.00 100.00
4.5 5.5 6.5 7.5	1,032,729 1,224,374 1,666,880 3,235,654	9,422 4,464 6,003	0.0091 0.0000 0.0027 0.0019	0.9909 1.0000 0.9973 0.9981	100.00 99.09 99.09 98.82
8.5 9.5 10.5 11.5	3,329,678 3,406,002 3,471,610 3,370,344	32,112 2,831 3,180 1,436	0.0096 0.0008 0.0009 0.0004	0.9904 0.9992 0.9991 0.9996	98.63 97.68 97.60 97.51
12.5 13.5 14.5 15.5	3,149,811 1,633,489 1,497,961 1,294,932	6,223 20,936 14,216 16,870	0.0020 0.0128 0.0095 0.0130	0.9980 0.9872 0.9905 0.9870	97.47 97.28 96.03 95.12
16.5 17.5 18.5	1,209,751 1,166,078 1,055,623 984,312	3,879 11,561 3,457 6,150	0.0032 0.0099 0.0033	0.9968 0.9901 0.9967 0.9938	93.88 93.58 92.65
20.5 21.5 22.5 23.5 24.5	980,426 877,157 745,825 615,349 571,553	3,451 1,365 4,802 2,906 2,143		0.9965 0.9984 0.9936 0.9953 0.9963	91.77 91.45 91.30 90.72 90.29
25.5 26.5 27.5 28.5	537,289 390,252 469,529 502,134	1,140 580 69 531	0.0021 0.0015 0.0001 0.0011	0.9979 0.9985 0.9999 0.9989	89.96 89.77 89.64 89.63
29.5 30.5 31.5 32.5	479,506 386,195 305,942 305,120	8,153 182 887	0.0170 0.0005 0.0000 0.0029	0.9830 0.9995 1.0000 0.9971	89.53 88.01 87.97 87.97
33.5 34.5 35.5 36.5 37.5 38.5	172,123 78,896 49,733 171,052 184,771 179,282	1,563 3,750 735 3,283 17,453 3,484	0.0091 0.0475 0.0148 0.0192 0.0945 0.0194	0.9909 0.9525 0.9852 0.9808 0.9055 0.9806	87.71 86.91 82.78 81.55 79.98 72.42

ACCOUNT 602.0 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1935-2005	EXPERIENCE	BAND 2	2000-2005

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5 40.5 41.5 42.5 43.5 44.5 45.5 46.5 47.5 48.5	176,084 172,407 172,167 49,966 31,001 14,375 34,111 40,200 36,809 43,187	2,175 2,191 5,788 3,915 6,193 519 305 262 233	0.0124 0.0127 0.0336 0.0784 0.1998 0.0361 0.0089 0.0065 0.0063	0.9876 0.9873 0.9664 0.9216 0.8002 0.9639 0.9911 0.9935 0.9937	71.02 70.14 69.25 66.92 61.67 49.35 47.57 47.15 46.84 46.54
49.5 50.5 51.5 52.5 53.5 54.5 55.5 56.5 57.5 58.5	44,370 41,559 21,076 18,286 19,112 11,560 8,504 8,290 7,827 1,541	224 898 61 100 863 105 305 74	0.0000 0.0054 0.0426 0.0033 0.0052 0.0747 0.0123 0.0000 0.0390 0.0480	1.0000 0.9946 0.9574 0.9967 0.9948 0.9253 0.9877 1.0000 0.9610 0.9520	46.54 46.59 44.32 44.17 43.94 40.66 40.16 40.16 38.59
59.5 60.5 61.5 62.5 64.5 65.5 66.5 67.5 68.5	69 192 3,108 3,108 17,004 17,004 16,935 16,812 13,896	69 74	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0041 0.0000 0.0044 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 0.9959 1.0000 0.9956 1.0000	36.74 36.74 36.74 36.74 36.74 36.74 36.59 36.59 36.43
69.5 70.5	13,896	654	0.0471	0.9529	36.43 34.71



ACCOUNT 603.0 SERVICES

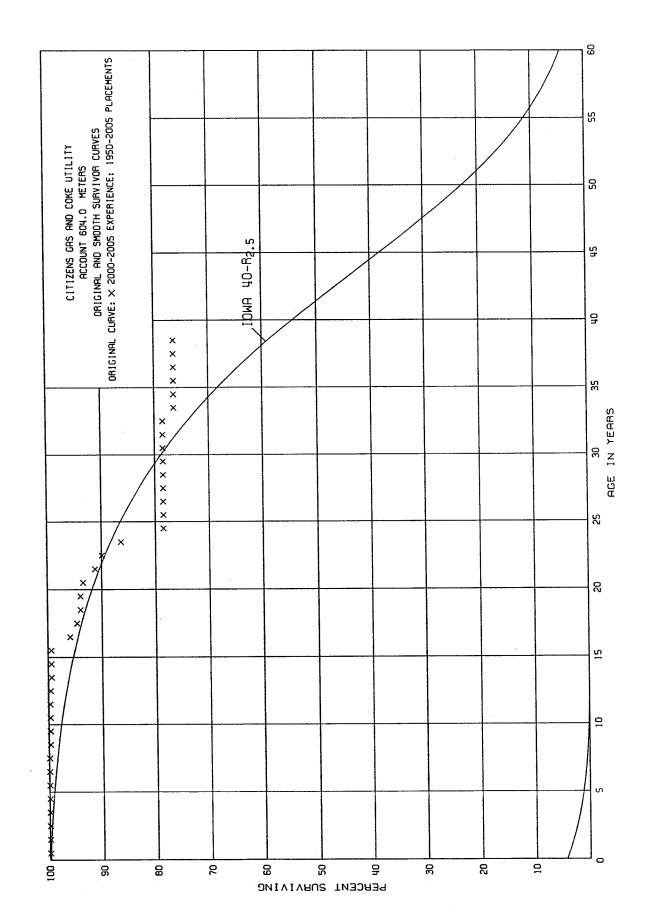
ORIGINAL LIFE TABLE

PLACEMENT	BAND 1935-2004		EXPERIEN	CE BAND	2000-2005
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENT DURING AGE INTERVAL		SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5 8.5	642,926 668,043 446,997 398,672 199,277 234,256 165,503 142,201 128,759 147,875	910 3,030 1,908	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0064 0.0235 0.0129	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.9936 0.9765 0.9871	100.00 100.00 100.00 100.00 100.00 100.00 100.00 99.36 97.03
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5	168,999 159,826 138,000 160,166 164,433 141,286 127,060 118,689 133,919 119,869	11,580 185 478 1,133 9,118 2,661 3,244 1,554 1,004 2,001	0.0685 0.0012 0.0035 0.0071 0.0555 0.0188 0.0255 0.0131 0.0075 0.0167	0.9315 0.9988 0.9965 0.9929 0.9445 0.9812 0.9745 0.9869 0.9925 0.9833	95.78 89.22 89.11 88.80 88.17 83.28 81.71 79.63 78.59 78.00
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	102,816 91,164 74,991 64,228 33,248 28,181 27,366 25,055 23,364 36,216	336 888 653 337 1,575 2,207 153 291 1,406	0.0033 0.0097 0.0087 0.0052 0.0474 0.0783 0.0000 0.0061 0.0125 0.0388	0.9967 0.9903 0.9913 0.9948 0.9526 0.9217 1.0000 0.9939 0.9875 0.9612	76.70 76.45 75.71 75.05 74.66 71.12 65.55 65.55 65.15
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	33,485 29,459 27,105 28,503 26,634 8,748 7,773 7,821 5,541 3,389	3,615 1,084 82 689 740 215	0.1080 0.0368 0.0000 0.0029 0.0259 0.0000 0.0000 0.0946 0.0388 0.0000	0.8920 0.9632 1.0000 0.9971 1.0000 1.0000 0.9054 0.9612 1.0000	61.84 55.16 53.13 53.13 52.98 51.61 51.61 46.73 44.92

ACCOUNT 603.0 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT	BAND 1935-2004	;	EXPERIEN	CE BAND	2000-2005
AGE AT BEGIN OF	EXPOSURES AT BEGINNING OF	RETIREMENT		SURV	PCT SURV BEGIN OF
INTERVAL	AGE INTERVAL	INTERVAL	RATIO	RATIO	INTERVAL
39.5	3,235		0.0000	1.0000	44.92
40.5	2,481		0.0000	1.0000	44.92
41.5	2,426	98	0.0404	0.9596	44.92
42.5	1,614	61	0.0378	0.9622	43.11
43.5	1,285		0.0000	1.0000	41.48
44.5	1,341		0.0000	1.0000	41.48
45.5	1,890		0.0000	1.0000	41.48
46.5 47.5	1,006		0.0000	1.0000	41.48
48.5	1,168 1,244		0.0000	1.0000	41.48
40.5	1,244		0.0000	1.0000	41.48
49.5	1,307	70	0.0536	0.9464	41.48
50.5	1,173		0.0000	1.0000	39.26
51.5	499		0.0000	1.0000	39.26
52.5	499	67	0.1343	0.8657	39.26
53.5	1,120		0.0000	1.0000	33.99
54.5	972		0.0000	1.0000	33.99
55.5	908		0.0000	1.0000	33.99
56.5	908		0.0000	1.0000	33.99
57.5	1,109		0.0000	1.0000	33.99
58.5	1,109	131	0.1181	0.8819	33.99
59.5	428		0.0000	1.0000	29.98
60.5	428		0.0000	1.0000	29.98
61.5	1,768		0.0000	1.0000	29.98
62.5	2,143		0.0000	1.0000	29.98
63.5	1,942		0.0000	1.0000	
64.5	2,605		0.0000	1.0000	
65.5	2,378		0.0000	1.0000	
66.5	2,378	1,339	0.5631	0.4369	
67.5	1,039		0.0000	1.0000	
68.5	663		0.0000	1.0000	13.10
69.5	663	121	0.1825	0.8175	13.10
70.5					10.71



ACCOUNT 604.0 METERS

ORIGINAL LIFE TABLE

PLACEMENT	BAND 1950-2005		EXPERIENC	E BAND	2000-2005
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENT DURING AGE INTERVAL		SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5 8.5	183,973 151,936 31,615 56,066 56,066 50,265 26,248 30,851 41,505 23,623	138	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0033	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.9967 1.0000	100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 99.67
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5 18.5	35,548 193,984 206,536 208,223 204,468 209,444 219,496 80,291 100,498 102,933	182 404 7,798 1,091 720	0.0000 0.0009 0.0019 0.0000 0.0000 0.0355 0.0136 0.0072	1.0000 1.0000 0.9991 0.9981 1.0000 1.0000 0.9645 0.9864 0.9928 1.0000	99.67 99.67 99.58 99.39 99.39 99.39 95.86 94.56 93.88
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	95,818 85,564 66,499 47,508 14,748 6,845 5,263 4,083 1,635 2,457	451 2,016 977 1,870 1,337	0.0236 0.0147 0.0394 0.0907 0.0000 0.0000	0.9953 0.9764 0.9853 0.9606 0.9093 1.0000 1.0000 1.0000	93.88 93.44 91.23 89.89 86.35 78.52 78.52 78.52 78.52 78.52
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	3,577 3,216 3,216 3,738 3,274 2,212 1,093 633 633	100	0.0000 0.0000 0.0000 0.0268 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 0.9732 1.0000 1.0000 1.0000	76.42

ACCOUNT 604.0 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT	BAND 1950-2005	EXPERIENCE BAND 2000-2005
BEGIN OF	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS PCT SURV DURING AGE RETMT SURV BEGIN OF INTERVAL RATIO RATIO INTERVAL
39.5 40.5 41.5 42.5 43.5 44.5 45.5 46.5 47.5 48.5	135 257 257 329 816 1,100 1,476 1,750 2,299 2,550	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000
49.5 50.5 51.5 52.5 53.5 54.5	2,142 1,858 1,348 951 403 79	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000

55.5

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THERMAL - STEAM

ACCOUNT 311.0 STRUCTURES & IMPROVEMENTS

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBA	RIM SURVIVOR CU ABLE RETIREMENT BALVAGE PERCENT	YEAR 6-2				
1914	2,136.87	1,877	536	1,601	12.67	126
1918	18,796.18	16,283	4,650	14,146	13.51	1,047
1920	1,618.61	1,398	399	1,220	13.50	90
1922	3,915.94	3,368	962	2,954	13.58	218
1924	18,870.66	16,150	4,612	14,259	13.73	1,039
1925	3,764.91	3,213	918	2,847	13.84	206
1926	158.41	135	39	119	13.95	9
1929	91.53	77	22	70	14.41	5
1931	91.14	76	22	69	14.79	5
1938	47,331.79	38,661	11,041	36,291	15.14	2,397
1940	860.21	699	200	660	15.15	44
1941	472.03	381	109	363	15.50	23
1942	388.00	313	89	299	15.24	20
1943	3,126.83	2,501	714	2,413	15.63	154
1944	69.41	55	16	. 53	15.42	3
1945	767.65	608	174	594	15.83	38
1946	78,108.41	61,815	17,654	60,454	15.68	3,855
1947	103,007.37	81,355	23,234	79,773	15.57	5,124
1948	2,498.25	1,954	558	1,940	16.03	121
1949	401.47	313	89	312	15.96	20
1950	223.91	174	50	174	15.93	11
1951	1,294.59	1,002	286	1,009	15.92	63
1952	267.10	204	58	209	16.43	13
1953	46,344.35	35,282	10,076	36,268	16.46	2,203
1954	1,395.77	1,057	302	1,094	16.52	. 66
1955	1,951.93	1,469	420	1,532	16.61	92
1956	149.18	112	32	117	16.29	7
1957	1,339.83	1,001	286	1,054	16.44	64
1958	153.35	114	33	120	16.60	7
1961	106.80	77	22	85	16.85	5
1962	236.42	171	49	187	16.74	11
1963	274.10	196	56	218	17.02	13
1964	1,780.16	1,263	361	1,419	16.98	84
1966	1,193.85	835	238	956	16.99	56
1967	132.44	92	26	106	17.06	6
1968	928.06	637	182	746	17.14	44

ACCOUNT 311.0 STRUCTURES & IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AT DECEMBER 31, 2005

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBA	IM SURVIVOR CU BLE RETIREMENT BALVAGE PERCENT	YEAR 6-2	5-S1 025		ž	
1970	755.76	507	145	611	17.41	35
1972	7,471.11	4,906	1,401	6,070	17.52	346
1973	2,869.99	1,865	533	2,337	17.50	134
1974	20,724.17	13,317	3,803	16,921	17.52	966
1975	13,885.58	8,809	2,516	11,370	17.58	647
1976	559.82	350	100	460	17.67	26
1977	4,873.07	3,000	857	4,016	17.80	226
1978	7,514.69	4,567	1,304	6,211	17.75	350
1979	2,067.39	1,233	352	1,715	17.94	96
1980	10,613.47	6,225	1,778	8,835	17.98	491
1981	20,613.91	11,869	3,390	17,224	18.05	954
1982	14,690.85	8,321	2,376	12,315	17.99	685
1983	2,643.75	1,463	418	2,226	18.15	123
1984	7,409.49	4,014	1,146	6,263	18.18	344
1985	77,062.82	40,759	11,640	65,423	18.26	3,583
1986	8,244.54	4,261	1,217	7,028	18.23	386
1987	12,459.50	6,247	1,784	10,676	18.40	580
1988	27,399.13	13,379	3,821	23,578	18.34	1,286
1989	114,129.30	53,858	15,381	98,748	18.47	5,346
1990	75,909.39	34,592	9,879	66,030	18.51	3,567
1991	6,047.42	2,657	759	5,288	18.50	286
1992	88,876.21	37,319	10,658	78,218	18.65	4,194
1993	61,958.10	24,864	7,101	54,857	18.65	2,941
1994	51,632.07	19,656	5,614	46,018	18.71	2,460
1995	2,687.19	965	276	2,411	18.74	129
1996	36,599.39	12,275	3,506	33,093	18.83	1,757
1997	8,098.37	2,513	718	7,380	18.90	390
1998	49,567.73	14,092	4,024	45,544	18.88	2,412
1999	16,872.99	4,311	1,231	15,642	18.94	826
2000	47,357.83	10,627	3,035	44,323	19.01	2,332
2001	19,485.50	3,718	1,062	18,424	19.08	966
2002	217,768.48	33,689	9,621	208,147	19.12	10,886
2003	462,656.10	53,437	15,261	447,395	19.15	23,363
2004	1,036,594.12	75,153	21,463	1,015,131	19.20	52,871
2005	221,556.00	5,628	1,607	219,949	19.22	11,444
	3,103,902.74	799,364	228,292	2,875,608		154,717

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4.98

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PCT.. 18.6

ACCOUNT 312.0 BOILER PLANT EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROB	RIM SURVIVOR CU ABLE RETIREMENT SALVAGE PERCENT	YEAR 6-2	5-R2 025			
1918	2,667.54	2,427	693	1,975	8.65	228
1924	652.52	580	166	487	10.24	48
1935	1,207.15	1,030	294	913	12.14	75
1938	116,671.17	98,447	28,116	88,555	12.50	7,084
1939	188.73	158	45	144	12.87	11
1940	1,402.16	1,166	333	1,069	13.24	81
1941	1,267.44	1,055	301	966	13.02	74
1942	82.31	68	19	63	13.42	5
1943	4,296.85	3,518	1,005	3,292	13.83	238
1944	260.16	213	61	199	13.68	15
1945	399.93	324	93	307	14.13	22
1946	96,249.45	77,885	22,243	74,006	14.03	5,275
1947	92,698.12	74,298	21,219	71,479	14.49	4,933
1948	3,064.60	2,450	700	2,365	14.44	164
1949	3,764.72	2,999	856	2,909	14.42	202
1950	54,970.36	43,322	12,372	42,598	14.92	2,855
1951	1,131.10	888	254	877	14.94	59
1952	607.85	475	136	472	14.99	31
1953	203,433.88	158,068	45,143	158,291	15.07	10,504
1955	2,809.18	2,142	612	2,197	15.72	140
1956	59,756.95	45,260	12,926	46,831	15.86	2,953
1957	868.69	657	188	681	15.60	44
1958	739.86	555	159	581	15.79	37
1959	1,435.06	1,068	305	1,130	16.00	71
1960	319.15	235	67	252	16.23	16
1961	173.82	128	37	137	16.10	9
1962	29,750.33	21,614	6,173	23,577	16.38	1,439
1963	10,085.95	7,287	2,081	8,005	16.32	491
1964	22,116.28	15,787	4,509	17,607	16.64	.1,058
1965	267.55	190	54	214	16.64	13
1966	887.74	624	178	710	16.68	43
1967	7,017.05	4,890	1,397	5,620	16.75	336
1968	42,895.60	29,598	8,453	34,443	16.85	2,044
1969	1,637.97	1,118	319	1,319	16.97	78
1970	3,104.36	2,094	598	2,506	17.13	146
1971	4,302.76	2,865	818	3,485	17.31	201

ACCOUNT 312.0 BOILER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AT DECEMBER 31, 2005

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBA	IM SURVIVOR CUF BLE RETIREMENT ALVAGE PERCENT.	YEAR 6-2				
1972	85,531.12	56,451	16,122	69,409	17.26	4,021
1973	381,231.04	247,800	70,769	310,462	17.50	17,741
1974	177,726.14	114,207	32,617	145,109	17.52	8,282
1975	127,957.13	81,176	23,183	104,774	17.58	5,960
1976	43,986.38	27,509	7,856	36,130	17.67	2,045
1977	56,776.88	35,117	10,029	46,748	17.58	2,659
1978	6,742.01	4,098	1,170	5,572	17.75	314
1979	14,109.11	8,450	2,413	11,696	17.75	659
1980	16,737.83	9,860	2,816	13,922	17.79	783
1981	29,512.28	17,064	4,873	24,639	17.87	1,379
1982	24,319.57	13,775	3,934	20,386	17.99	1,133
1983	33,076.10	18,384	5,250	27,826	17.98	1,548
1984	51,396.77	27,960	7,985	43,412	18.02	2,409
1985	46,734.01	24,816	7,087	39,647	18.11	2,189
1986	39,423.96	20,449	5,840	33,584	18.09	1,856
1987	41,526.00	20,975	5,990	35,536	18.13	1,960
1988	107,421.17	52,636	15,032	92,389	18.21	5,074
1989	72,266.37	34,341	9,808	62,458	18.22	3,428
1990	636,649.97	292,095	83,420	553,230	18.28	30,264
1991	182,915.13	80,903	23,105	159,810	18.29	8,738
1992	380,892.96	161,461	46,112	334,781	18.35	18,244
1993	126,125.64	51,081	14,588	111,538	18.36	6,075
1994	129,790.90	50,008	14,282	115,509	18.35	6,295
1995	101,850.94	37,002	10,568	91,283	18.40	4,961
1996	205,275.09	69,814	19,938	185,337	18.43	10,056
1997	22,825.40	7,199	2,056	20,769	18.45	1,126
1998	646,904.48	187,279	53,486	593,418	18.41	32,233
1999	313,471.65	81,722	23,339	290,133	18.44	15,734
2000	63,355.46	14,565	4,160	59,195	18.42	3,214
2001	438,392.25	86,232	24,627	413,765	18.38	22,512
2002	376,779.52	60,398	17,249	359,531	18.33	19,614
2003	1,568,090.38	188,641	53,874	1,514,216	18.29	82,789
2004	1,808,192.10	138,146	39,454	1,768,738	18.15	97,451
2005	546,924.54	15,095	4,311	542,614	17.65	30,743
	9,678,094.62	2,942,192	840,266	8,837,828		494,512

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PCT.. 17.9 5.11

ACCOUNT 314.0 TURBOGENERATOR UNITS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AT DECEMBER 31, 2005

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBA	IM SURVIVOR CU BLE RETIREMENT ALVAGE PERCENT	YEAR 6-2	5-R2 025			
1924	101,985.09	95,591	27,300	74,685	5.45	13,704
1926	256.08	238	68	188	5.97	31
1929	85.64	79	23	63	6.83	9
1935	977.58	875	250	728	8.24	88
1938	23,069.96	20,401	5,826	17,244	8.83	1,953
1941	315.87	275	79	237	9.57	25
1946	126.59	107	31	96	10.92	9
1948	142.46	119	34	108	11.46	9
1949	209.13	174	50	159	11.52	14
1952	255.63	208	59	197	12.29	16
1953	4,038.21	3,265	932	3,106	12.44	250
1959	199.74	154	44	156	13.74	11
1960	303.14	232	66	237	14.02	17
1962	953.74	714	204	750	14.64	51
1964	128.33	94	27	101	14.99	7
1970	162.14	112	32	130	15.78	8
1972	867.46	587	168	699	16.00	44
1975	201.48	131	37	164	16.45	10
1976	4,042.44	2,588	739	3,303	16.58	199
1979	607.11	370	106	501	16.98	30
1984	11,269.95	6,228	1,779	9,491	17.41	545
1985	5,030.13	2,712	775	4,255	17.52	243
1987	7,021.52	3,599	1,028	5,994	17.60	341
1988	723.86	360	103	621	17.71	35
1990	1,355.80	630	180	1,176	17.83	66
1991	39,339.86	17,628	5,034	34,306	17.86	1,921
1992	25,761.29	11,095	3,169	22,592	17.85	1,266
1993	3,053.18	1,252	358	2,695	17.99	150
1994	12,927.55	5,040	1,439	11,489	18.00	638
1996	6,692.68	2,308	659	6,034	18.05	334
2002	472,390.69	76,716	21,909	450,482	18.05	24,957
2003	24,443.24	2,982	852	23,591	17.99	1,311
2004	1,413,278.28	109,812	31,360	1,381,918	17.81	77,592
	2,162,215.85	366,676	104,720	2,057,496		125,884

5.82

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PCT.. 16.3

ACCOUNT 315.0 ACCESSORY ELECTRIC EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBAI	IM SURVIVOR CU BLE RETIREMENT ALVAGE PERCENT	YEAR 6-2	0-R2 025			
1923	1,789.58	1,727	493	1,297	2.97	437
1924	223.59	215	61	163	3.25	50
1925	120.21	115	33	87	3.53	25
1935	778.29	719	205	573	5.83	98
1937	365.28	333	95	270	6.68	40
1938	2,528.67	2,304	658	1,871	6.57	285
1939	133.69	121	35	99	7.03	14
1940	184.94	166	47	138	7.49	18
1943	3,164.27	2,808	802	2,362	7.92	298
1946	13,356.81	11,603	3,314	10,043	8.99	1,117
1947	8,279.08	7,168	2,047	6,232	9.07	687
1948	148.53	128	37	112	9.17	12
1949	331.56	283	81	251	9.72	26
1950	13,517.46	11,479	3,278	10,239	9.86	1,038
1951	608.39	514	147	461	10.01	46
1953	7,159.67	5,939	1,696	5,464	10.79	506
1954	107.23	88	25	82	11.00	7
1955	774.47	634	181	593	11.23	53
1956	5,330.85	4,328	1,236	4,095	11.48	357
1957	171.48	138	39	132	11.74	11
1959	986.27	780	223	763	12.32	62
1960	950.86	744	212	739	12.64	58
1961	265.40	207	59	206	12.64	16
1962	1,426.40	1,098	314	1,112	12.99	86
1963	12,745.76	9,697	2,769	9,977	13.36	747
1964	5,280.01	3,988	1,139	4,141	13.45	308
1965	434.32	324	93	341	13.85	25
1966	65.90	49	14	52	13.97	4
1967	3,534.06	2,585	738	2,796	14.13	198
1968	1,229.23	890	254	975	14.31	68
1970	3,576.16	2,527	722	2,854	14.75	193
1971	3,260.85	2,272	649	2,612	15.00	174
1972	1,017.48	702	200	817	15.04	54
1973	14,481.16	9,837	2,809	11,672	15.34	761
1974	19,879.58	13,339	3,810	16,070	15.45	1,040
1975	28,295.97	18,729	5,349	22,947	15.58	1,473

ACCOUNT 315.0 ACCESSORY ELECTRIC EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AT DECEMBER 31, 2005

מ גיינע	ORIGINAL	CALCULATED	ALLOC. BOOK	FUT. BOOK	REM.	ANNUAL
YEAR	COST	ACCRUED	RESERVE	ACCRUALS	LIFE	ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
TNTER	IM SURVIVOR CU	RVE TOWA 5	0-R2			
	BLE RETIREMENT		025			
	ALVAGE PERCENT		025			
		•				
1976	9,171.44	5,980	1,708	7,463	15.75	474
1977	1,288.36	826	236	1,052	15.94	66
1978	226.20	142	41	185	16.17	11
1979	1,689.57	1,048	299	1,391	16.24	86
1980	1,717.01	1,047	299	1,418	16.34	87
1981	8,111.58	4,849	1,385	6,727	16.48	408
1982	2,600.95	1,522	435	2,166	16.66	130
1983	4,143.46	2,378	679	3,464	16.71	207
1984	1,414.20	794	227	1,187	16.81	71
1985	12,855.35	7,037	2,010	10,845	16.95	640
1986	7,020.35	3,738	1,068	5,952	17.13	347
1987	2,532.10	1,312	375	2,157	17.21	125
1988	3,391.89	1,710	488	2,904	17.22	169
1989	137,919.63	67,139	19,174	118,746	17.40	6,824
1990	124,251.73	58,547	16,721	107,531	17.39	6,183
1991	41,433.53	18,745	5,353	36,081	17.55	2,056
1992	250,189.75	108,757	31,060	219,130	17.56	12,479
1993	89,554.58	37,165	10,614	78,941	17.62	4,480
1994	12,552.78	4,952	1,414	11,139	17.65	631
1995	2,652.51	986	282	2,371	17.75	134
1996	93,026.12	32,345	9,237	83,789	17.82	4,702
1997	3,299.64	1,066	304	2,996	17.82	168
1998	73,858.08	21,825	6,234	67,624	17.88	3,782
1999	4,127.89	1,100	314	3,814	17.89	213
2000	739.23	174	50	689	17.92	38
2001	30,870.00	6,211	1,774	29,096	17.87	1,628
2003	23,519.85	2,900	828	22,692	17.78	1,276
2004	2,950.00	232	66	2,884	17.62	164
	1,103,611.24	513,105	146,539	957,072		57,971

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PCT.. 16.5 5.25

ACCOUNT 316.0 MISCELLANEOUS POWER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AT DECEMBER 31, 2005

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBA	RIM SURVIVOR CU ABLE RETIREMENT SALVAGE PERCENT	YEAR 6-2				
1923	2,626.47	2,535	724	1,902	2.97	640
1938	109.95	100	29	81	6.57	12
1944	71.41	63	18	53	8.43	6
1948	195.76	169	48	148	9.17	16
1950	1,117.10	949	271	846	9.86	86
1952	74.16	62	18	56	10.60	5
1955	109.79	90	26	84	11.23	7
1956	572.90	465	133	440	11.48	38
1968	152.72	111	32	121	14.31	8
1974	1,033.30	693	198	835	15.45	54
1975	786.63	521	149	638	15.58	41
1977	206.46	132	38	168	15.94	11
1981	2,267.42	1,355	387	1,880	16.48	114
1982	3,515.36	2,057	587	2,928	16.66	176
1983	11,483.50	6,589	1,882	9,602	16.71	575
1984	7,320.84	4,108	1,173	6,148	16.81	366
1987	398.77	207	59	340	17.21	20
1988	8,807.98	4,439	1,268	7,540	17.22	438
1990	1,658.30	781	223	1,435	17.39	83
1991	171.93	78	22	150	17.55	9
1992	2,560.38	1,113	318	2,242	17.56	128
1993	8,549.30	3,548	1,013	7,536	17.62	428
1994	373.82	147	42	332	17.65	19
1995	2,056.31	764	218	1,838	17.75	104
1996	924.84	322	92	833	17.82	47
1997	1,508.78	487	139	1,370	17.82	77
1999	7,054.96	1,880	537	6,518	17.89	364
2000	6,192.58	1,455	415	5,778	17.92	322
2001	5,894.00	1,186	339	5,555	17.87	311
2002	13,378.00	2,191	626	12,752	17.87	714
2003	67,465.81	8,319	. 2,375	65,091	17.78	3,661
2004	25,323.19	1,988	568	24,755	17.62	1,405
	183,962.72	48,904	13,967	169,995		10,285

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PCT.. 16.5 5.59

ACCOUNT 391.1 OFFICE FURNITURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AT DECEMBER 31, 2005

YEAR (1)	ORIGINAL COST (2)	CALCULATED A ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	CURVE 25 AGE PERCENT					
1976	111.65	112	112			
1977	149.75	150	150			
1978	67.25	67	67			
1980	676.98	677	, 677			
1981	927.50	909	225	703	0.50	703
1982	940.84	884	218	723	1.50	482
1983	509.03	458	113	396	2.50	158
1985	405.92	333	82	324	4.50	72
1986	604.71	472	117	488	5.50	89
1987	934.07	691	171	763	6.50	117
1988	1,828.00	1,280	316	1,512	7.50	202
1989	1,227.93	810	200	1,028	8.50	121
1990	1,536.15	952	235	1,301	9.50	137
1991	3,897.53	2,261	559	3,339	10.50	318
1992	5,281.15	2,852	705	4,576	11.50	398
1993	2,511.21	1,256	310	2,201	12.50	176
1994	443.02	204	50	393	13.50	29
1995	816.06	343	85	731	14.50	50
1996	1,791.85	681	168	1,624	15.50	105
1997	101.23	34	8	93	16.50	· 6
1998	719.77	216	53	667	17.50	38
1999	208.80	54	13	196	18.50	11
2000	419.48	92	23	396	19.50	20
2001	4,855.38	874	216	4,639	20.50	226
2003	8,440.69	844	209	8,232	22.50	366
2004	35,931.65	2,156	533	35,399	23.50	1,506
	75,337.60	19,662	5,615	69,724		5,330
COMPOSITE	REMAINING	LIFE AND ANNU	AL ACCRUAL	RATE, PCT	13.1	7.07

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ACCOUNT 391.2 OFFICE EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	R CURVE 15 VAGE PERCENT	-				
2002	6,370.00	1,486	424	5,946	11.50	517
	6,370.00	1,486	424	5,946		517
COMPOSIT	E REMAINING	LIFE AND ANN	UAL ACCRUAL	RATE, PCT	11.5	8.12

ACCOUNT 391.3 COMPUTER EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIV	OR CURVE 5-	SQUARE				
NET SA	ALVAGE PERCENT	0				
1995	121.35	121	121			
1996	5,171.56	5,172	5,172			
1997	11,905.86	11,906	11,906			
1998	4,268.89	•	4,269			
	•	4,269	•			
2000	16,303.84	16,304	16,304			
2001	4,148.53	3,734	421	3,728	0.50	3,728
2002	18,400.48	12,880	1,454	16,946	1.50	11,297
2003	37,494.56	18,747	2,116	35,379	2.50	14,152
2004	402,295.39	120,689	13,623	388,672	3.50	111,049
2005	1,861.16	186	21	1,840	4.50	409
	501,971.62	194,008	55,407	446,565		140,635
COMPOS	TTE REMAINING	LIFE AND ANN	UAL ACCRUAL	RATE. PCT	3.2	28.02

ACCOUNT 391.3 SOFTWARE

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVO	R CURVE 5-	SQUARE				
NET SAL	VAGE PERCENT	0				
2003	52,543.34	26,272	7,503	45,040	2.50	18,016
2003	121,979.76	36,594	10,451	111,529		31,865
2005	146,689.08	14,669	4,189	142,500	4.50	31,667
	321,212.18	77,535	22,143	299,069		81,548
COMPOSIT	E REMAINING	LIFE AND ANN	UAL ACCRUAL	RATE, PCT	3.7	25.39

ACCOUNT 392.0 TRANSPORTATION EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	VOR CURVE IC SALVAGE PERCENT	WA 9-L3 ' +15				
1988	2,116.85	1,735	496	1,303	0.65	1,303
1990	4,263.47	3,387	967	2,657	1.08	2,460
1991	16,511.43	12,882	3,679	10,356	1.30	7,966
1993	4,622.61	3,448	985	2,944	1.75	1,682
1994	21,458.62	15,586	4,451	13,789	1.96	7,035
1995	10,878.85	7,690	2,196	7,051	2.13	3,310
1998	15,652.52	9,959	2,844	10,461	2.52	4,151
1999	7,313.27	4,328	1,236	4,980	2.84	1,754
2002	13,119.98	4,751	1,357	9,795	4.72	2,075
2003	197,875.53	52,224	14,915	153,279	5.55	27,618
2004	166,749.64	26,703	7,626	134,111	6.46	20,760
2005	91,981.60	4,926	1,407	76,777	7.44	10,319
	552,544.37	147,619	42,159	427,503		90,433
COMPOS	SITE REMAINING	LIFE AND ANN	UAL ACCRUAL	RATE, PCT	4.7	16.37

ACCOUNT 393.0 STORES EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	CURVE 30					
NEI SADV	AGE FERCENI	0				
1975	145.15	145	145			
1980	630.53	536	129	502	4.50	112
1995	1,562.48	547	131	1,431	19.50	73
1998	945.94	236	57	889	22.50	40
2003	8,175.00	681	164	8,011	27.50	291
2004	5,597.44	280	67	5,530	28.50	194
	17,056.54	2,425	693	16,363		710
COMPOSITE	REMAINING	LIFE AND ANN	UAL ACCRUAL	RATE, PCT	23.0	4.16

ACCOUNT 394.0 TOOLS, SHOP, GARAGE EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)			
SURVIVOR CURVE 20-SQUARE									
NET SA	LVAGE PERCENT	0							
1972	1,039.50	1,040	1,040						
1973	4,044.15	4,044	4,044						
1974	622.98	623	623						
1975	2,114.51	2,115	2,115						
1976	1,313.82	1,314	1,314						
1977	1,933.24	1,933	1,933						
1978	1,478.72	1,479	1,479						
1979	517.50	518	518						
1980	4,414.05	4,414	4,414						
1981	2,482.38	2,482	2,482						
1982	3,235.86	3,236	3,236						
1983	10,051.18	10,051	10,051						
1984	2,392.95	2,393	2,393						
1985	5,343.06	5,343	5,343						
1986	2,310.79	2,253	423-	2,734	0.50	2,734			
1987	8,969.12	8,296	1,559-	10,528	1.50	7,019			
1988	3,285.11	2,874	540-	3,825	2.50	1,530			
1989	12,113.04	9,993	1,879-	13,992	3.50	3,998			
1990	9,747.98	7,555	1,420-	11,168	4.50	2,482			
1991	8,733.11	6,332	1,190-	9,923	5.50	1,804			
1992	9,502.26	6,414	1,206-	10,708	6.50	1,647			
1993	409.68	256	48-	458	7.50	61			
1994	6,248.05	3,593	675-	6,923	8.50	814			
1995	6,358.78	3,338	628-	6,987	9.50	735			
1996	1,210.78	575	108-	1,319	10.50	126			
1997	670.39	285	54-	724	11.50	63			
1999	3,521.37	1,144	215-	3,736	13.50	277			
2001	15,821.29	3,560	. 669-	16,490	15.50	1,064			
2003	31,097.37	3,887	731-	31,828	17.50	1,819			
2004	7,405.54	555	104-	7,510	18.50	406			
2005	36,792.85	920	173-	36,966	19.50	1,896			
	205,181.41	102,815	29,363	175,819		28,475			
COMPOSI	TE REMAINING	LIFE AND ANN	TUAL ACCRUAL F	RATE, PCT	6.2	13.88			

ACCOUNT 395.0 LABORATORY EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	CURVE 15 AGE PERCENT					
1996	430.28	272	78	352	5.50	64
2000	10,033.80	3,679	1,051	8,983	9.50	946
2004	6,665.21	667	190	6,475	13.50	480
	17,129.29	4,618	1,319	15,810		1,490
COMPOSITE	REMAINING	LIFE AND ANNU	ACCRUAL	RATE, PCT	10.6	8.70

ACCOUNT 396.0 POWER OPERATED EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURV	/IVOR CURVE IC	WA 14-L1.5				
NET	SALVAGE PERCENT	+20				
1000	7 222 40	F 066	3 447	4 222	2 21	1 200
1982	7,223.49	5,066	1,447	4,332	3.31	1,309
1983	4,997.09	3,463	989	3,009	3.47	867
1986	113.54	75	21	70	4.08	17
1988	10,388.93	6,632	1,894	6,417	4.43	1,449
1990	1,946.00	1,190	340	1,217	4.78	255
2002	57,667.00	14,098	4,026	42,108	7.95	5,297
2003	159,085.00	28,953	8,269	118,999	8.49	14,016
2005	70,500.00	2,814	804	55,596	9.53	5,834
	311,921.05	62,291	17,790	231,748		29,044
COMPO	OSITE REMAINING	LIFE AND ANN	UAL ACCRUAL	RATE, PCT	8.0	9.31

ACCOUNT 397.0 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AT DECEMBER 31, 2005

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIV	OR CURVE 15	-SQUARE				
NET SA	LVAGE PERCENT	0				
1989	199.88	200	200			
1991	253.23	245	69	184	0.50	184
1993	186.52	155	43	144	2.50	58
2002	93,929.30	21,914	6,140	87,789	11.50	7,634
2003	20,340.27	3,391	950	19,390	12.50	1,551
2004	4,785.00	479	134	4,651	13.50	345
2005	3,633.56	121	34	3,600	14.50	248
	123,327.76	26,505	7,570	115,758		10,020
COMPOSI	TE REMAINING	LIFE AND ANN	UAL ACCRUAL	RATE, PCT	11.6	8.12

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ACCOUNT 398.0 MISCELLANEOUS EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	OR CURVE 20 LVAGE PERCENT	_				
1973	271.10	271	271			
1978	138.00	138	138			•
1981	67.91	68	68			
1982	488.47	488	488			
1988	223.78	196	52	172	2.50	69
1989	66.65	55	15	52	3.50	15
1990	81.76	63	17	65	4.50	14
1991	105.21	76	20	85	5.50	15
1993	35,797.67	22,374	5,957	29,841	7.50	3,979
1995	331.62	174	46	286	9.50	30
1997	3,912.34	1,663	443	3,469	11.50	302
2002	53,235.41	9,316	2,480	50,755	16.50	3,076
2003	8,112.57	1,014	270	7,843	17.50	448
2004	9,695.01	727	194	9,501	18.50	514
	112,527.50	36,623	10,459	102,069		8,462
COMPOSI	TE REMAINING	LIFE AND ANNU	JAL ACCRUAL	RATE, PCT	12.1	7.52

ACCOUNT 600.0 LAND RIGHTS

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	R CURVE IC VAGE PERCENT					
1973	1,792.46	915	261	1,531	31.19	49
	1,792.46	915	261	1,531		49
COMPOSITE	E REMAINING	LIFE AND ANNU	UAL ACCRUAL	RATE, PCT	31.2	2.73

ACCOUNT 602.0 MAINS

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	IVOR CURVE IO SALVAGE PERCENT					
1935	13,242.08	11,175	3,191	10,713	17.22	622
1937	2,841.96	2,371	677	2,307	17.71	130
1938	123.54	102	29	101	17.97	6
1945	68.53	55	16	56	18.87	3
1946	1,398.88	1,110	317	1,152	19.24	60
1947	5,981.25	4,703	1,343	4,937	19.63	252
1948	462.33	363	104	381	19.42	20
1949	109.20	85	24	91	19.83	5
1950	2,192.40	1,699	485	1,817	19.68	92
1951	7,520.94	5,767	1,647	6,250	20.13	310
1952	586.01	448	128	487	20.03	24
1953	8,178.43	6,177	1,764	6,823	20.49	333
1954	20,720.63	15,576	4,448	17,309	20.44	847
1955	3,025.68	2,262	646	2,531	20.42	124
1956	1,872.56	1,382	395	1,571	20.92	75
1957	1,010.91	741	212	849	20.94	41
1958	3,775.34	2,749	785	3,179	20.99	151
1959	2,681.57	1,938	553	2,263	21.07	107
1960	689.35	491	140	584	21.61	27
1961	13,459.59	9,497	2,712	11,421	21.72	526
1962	16,922.09	11,827	3,378	14,390	21.86	658
1963	117,656.35	81,388	23,244	100,295	22.01	4,557
1964	2,086.60	1,428	408	1,783	22.19	80
1965	4,487.62	3,035	867	3,845	22.39	172
1966	923.58	617	176	794	22.61	35
1967	7,688.99	5,098	1,456	6,617	22.48	294
1968	4,916.37	3,213	918	4,244	22.74	187
1969	1,732.21	1,115	318	1,501	23.02	65
1970	28,566.29	18,102	5,170	24,825	23.32	1,065
1971	98,029.41	61,079	17,444	85,487	23.64	3,616
1972	136,517.19	84,042	24,002	119,341	23.64	5,048
1973	25,963.16	15,683	4,479	22,782	23.99	950
1974	88,271.04	52,265	14,926	77,759	24.36	3,192
1975	87,624.08	51,072	14,586	77,419	24.45	3,166
1976	54,412.98	31,012	8,857	48,277	24.85	1,943
1977	66,918.08	37,451	10,696	59,568	24.97	2,386
1978	57,547.79	31,409	8,970	51,455	25.41	2,025

ACCOUNT 602.0 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AT DECEMBER 31, 2005

YEAR (1)	ORIGINAL COST (2)	CALCULATED A ACCRUED (3)	LLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	VOR CURVE IO SALVAGE PERCENT	WA 55-L1.5 5				
1979	171,860.12	91,345	26,087	154,366	25.85	5,972
1980	120,573.95	62,630	17,887	108,716	26.05	4,173
1981	136,667.76	68,909	19,680	123,821	26.52	4,669
1982	180,617.76	88,699	25,332	164,317	26.75	6,143
1983	196,954.26	93,537	26,713	180,089	27.25	6,609
1984	157,945.00	72,390	20,674	145,168	27.76	5,229
1985	170,737.01	75,707	21,621	157,653	28.04	5,622
1986	190,570.56	81,160	23,179	176,920	28.58	6,190
1987	238,466.81	97,752	27,917	222,473	28.89	7,701
1988	225,213.42	88,158	25,177	211,297	29.45	7,175
1989	266,631.08	99,331	28,368	251,595	30.01	8,384
1990	350,208.60	124,252	35,485	332,234	30.37	10,940
1991	291,478.94	97,631	27,883	278,170	30.95	8,988
1992	1,704,126.94	538,768	153,868	1,635,465	31.34	52,185
1993	469,443.68	138,657	39,599	453,317	31.94	14,193
1994	326,860.53	89,988	25,700	317,504	32.36	9,812
1995	217,696.78	55,202	15,765	212,817	32.98	6,453
1996	255,989.59	59,241	16,919	251,870	33.60	7,496
1997	209,751.75	44,004	12,567	207,672	34.05	6,099
1998	137,111.88	25,597	7,310	136,657	34.69	3,939
1999	28,373.30	4,648	1,327	28,465	35.17	809
2000	128,974.06	18,025	5,148	130,275	35.82	3,637
2001	55,853.46	6,469	1,848	56,798	36.31	1,564
2002	224,009.96	20,416	5,831	229,379	36.82	6,230
2003	181,480.95	11,967	3,418	187,137	37.34	5,012
2004	239,670.06	9,588	2,738	248,916	37.87	6,573
2005	1,334,642.22	18,358	5,243	1,396,131	37.67	37,062
	9,102,115.44	2,740,956	782,795	8,774,426		282,053
COMPOS	SITE REMAINING	LIFE AND ANNUA	L ACCRUAL	RATE, PCT	31.1	3.10

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ACCOUNT 603.0 SERVICES

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	VOR CURVE 10 SALVAGE PERCENT					
1935	542.24	509	145	451	12.14	37
1937	375.90	351	100	313	12.15	26
1940	227.07	209	60	190	12.63	15
1942	201.13	183	52	169	13.42	13
1946	777.01	692	198	657	14.03	47
1950	63.80	56	16	54	14.43	4
1951	148.33	129	37	126	14.46	9
1952	219.30	188	54	187	14.99	12
1954	674.16	573	164	578	15.17	38
1955	64.20	54	15	56	15.29	4
1957	72.84	61	17	63	15.60	4
1958	124.30	103	29	108	15.79	7
1959	884.56	724	207	766	16.00	48
1960	124.79	101	29	108	16.23	7
1961	78.57	63	18	68	16.48	4
1962	267.68	214	61	233	16.38	14
1963	786.81	622	178	687	16.67	41
1964	179.32	140	40	157	16.98	9
1965	1,638.02	1,270	363	1,439	16.97	85
1966	278.83	213	61	246	17.32	14
1967	2,016.03	1,528	436	1,782	17.36	103
1968	1,868.55	1,403	401	1,654	17.45	95
1969	837.20	618	176	745	17.85	42
1970	1,154.56	843	241	1,029	17.97	57
1971	18,834.59	13,581	3,879	16,839	18.13	929
1972	2,067.10	1,470	420	1,854	18.31	101
1973	832.76	584	167	749	18.52	40
1974	3,878.63	2,688	768	3,498	18.50	189
1975	1,247.87	850	243	1,130	18.76	60
1976	2,479.29	1,657	473	2,254	19.04	118
1977	6,381.23	4,201	1,200	5,819	19.12	304
1978	3,686.66	2,387	682	3,373	19.23	175
1979	3,143.90	1,998	571	2,887	19.37	149
1980	3,569.93	2,223	635	3,292	19.55	168
1981	8,355.44	5,089	1,453	7,738	19.75	392
1982	34,527.54	20,620	5,889	32,091	19.79	1,622
1983	16,782.40	9,762	2,788	15,673	20.05	782

ACCOUNT 603.0 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AT DECEMBER 31, 2005

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVI	VOR CURVE 10	WA 40-L0.5				
NET S	SALVAGE PERCENT	10				
1984	19,124.83	10,855	3,100	17,937	20.17	889
1985	14,459.28	8,021	2,291	13,614	20.15	676
1986	20,828.32	11,215	3,203	19,708	20.34	969
1987	22,976.93	11,970	3,418	21,857	20.56	1,063
1988	18,081.86	9,120	2,604	17,286	20.67	836
1989	22,562.05	10,975	3,134	21,684	20.81	1,042
1990	31,577.97	14,808	4,229	30,507	20.86	1,462
1991	30,024.74	13,459	3,844	29,183	21.09	1,384
1992	16,229.31	6,941	1,982	15,870	21.22	748
1993	1,336.47	542	155	1,315	21.40	61
1994	41,276.87	15,823	4,519	40,886	21.50	1,902
1995	23,399.58	8,407	2,401	23,339	21.65	1,078
1996	11,206.69	3,736	1,067	11,260	21.85	515
1997	16,996.88	5,213	1,489	17,208	21.99	783
1998	29,894.08	8,336	2,381	30,502	22.09	1,381
1999	25,116.90	6,250	1,785	25,844	22.24	1,162
2000	110,214.70	24,005	6,855	114,381	22.28	5,134
2002	212,509.82	31,675	9,045	224,716	22.34	10,059
2003	68,351.49	7,616	2,175	73,012	22.19	3,290
2004	251,850.17	17,841	5,095	271,940	21.81	12,469
	1,107,411.48	304,765	87,038	1,131,112		52,667

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PCT.. 21.5 4.76

CITIZENS GAS AND COKE UTILITY STEAM

ACCOUNT 604.0 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AT DECEMBER 31, 2005

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	OR CURVE IOW LVAGE PERCENT					
1950	78.97	73	21	58	4.38	13
1951	323.93	298	85	239	4.67	51
1952	548.28	505	144	404	4.64	87
1953	396.54	362	103	294	4.97	59
1954	510.60	463	132	379	5.32	71
1955	283.47	256	73	210	5.36	39
1956	487.34	437	125	362	5.75	63
1957	72.40	65	19	53	5.85	9
1959	121.90	107	31	91	6.41	14
1960	134.60	117	33	102	6.85	15
1967	633.19	510	146	487	9.34	52
1969	459.59	359	103	357	10.23	35
1970	1,119.29	858	245	874	10.80	81
1971	1,062.41	803	229	833	11.16	75
1972	364.38	270	77	287	11.75	24
1973	110.53	80	23	88	12.14	7
1975	820.37	570	163	657	13.36	49
1977	239.93	159	45	195	14.42	14
1978	2,912.17	1,890	540	2,372	14.87	160
1979	1,290.71	814	232	1,059	15.52	68
1980	1,581.76	968	276	1,306	16.17	81
1981	7,386.74	4,398	1,256	6,131	16.65	368
1982	30,889.49	17,786	5,080	25,809	17.31	1,491
1983	18,255.07	10,146	2,898	15,357	17.98	854
1984	19,960.90	10,729	3,064	16,897	18.50	913
1985	11,092.71	5,730	1,636	9,457	19.18	493
1986	8,696.87	4,308	1,230	7,467	19.87	376
1987	5,569.62	2,648	756	4,814	20.41	236
1988	11,460.79	5,195	1,484	9,977	21.11	473
1989	150,638.48	64,880	18,530	132,108	21.81	6,057
1990	11,925.18	4,880	1,394	10,531	22.38	471
1991	6,567.84	2,533	723	5,845	23.09	253
1992	12,048.16	4,376	1,250	10,798	23.67	456
1993	4,421.15	1,498	428	3,993	24.40	164
1997	24,312.91	5,828	1,664	22,649	26.96	840
1998	1,797.33	384	110	1,687	27.59	61
2000	24,016.73	3,845	1,098	22,919	28.86	794

CITIZENS GAS AND COKE UTILITY STEAM

ACCOUNT 604.0 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AT DECEMBER 31, 2005

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUT. BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVI	VOR CURVE IC	WA 40-R2.5				
NET S	ALVAGE PERCENT	r 0				
2001	5,801.10	770	220	5,581	29.40	190
2004	122,118.43	5,752	1,642	120,476	30.35	3,970
2005	32,036.44	535	153	31,883	29.53	1,080
	522,548.30	166,185	47,461	475,086		20,607
COMPOS	SITE REMAINING	LIFE AND ANN	UAL ACCRUAL	RATE, PCT	23.1	3.94

BEFORE THE

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF THE BOARD OF DIRECTORS)	
FOR UTILITIES OF THE DEPARTMENT OF)	
PUBLIC UTILITIES OF THE CITY OF)	
INDIANAPOLIS, AS SUCCESSOR TRUSTEE)	
OF A PUBLIC CHARITABLE TRUST, D/B/A)	
CITIZENS THERMAL ENERGY FOR (1))	
AUTHORITY TO INCREASE ITS RATES AND)	
CHARGES FOR STEAM UTILITY SERVICE, (2))	CAUSE NO. 43201
APPROVAL OF A NEW SCHEDULE OF)	
RATES AND CHARGES APPLICABLE)	
THERETO, (3) APPROVAL OF CHANGES TO ITS)	•
GENERAL TERMS AND CONDITIONS FOR)	
STEAM SERVICE, (4) APPROVAL OF NEW)	
DEPRECIATION ACCRUAL RATES, AND (5))	
APPROVAL FOR THE QUARTERLY FILING OF)	
FUEL COST ADJUSTMENT APPLICATIONS.)	

DIRECT TESTIMONY of CRAIG A. JONES

> On Behalf of Petitioner

Citizens Thermal Energy

- 1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- 2 A. My name is Craig A. Jones. My business address is 2020 North Meridian Street,
- 3 Indianapolis, Indiana.
- 4 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
- 5 A. I am employed by the Board of Directors for Utilities of the Department of Public
- 6 Utilities of the City of Indianapolis, d/b/a Citizens Gas & Coke Utility and also
- 7 Citizens Thermal Energy ("Citizens" or the "Petitioner"), in the capacity of Manager
- 8 Rates and Regulatory Affairs.
- 9 Q. HOW LONG HAVE YOU HELD THAT POSITION?
- 10 A. Since March 2004.
- 11 Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?
- 12 A. I graduated from the University of Missouri Columbia in December 1980 with a
- Bachelor of Science Degree in Agricultural Engineering. In May 1981, I received a
- Bachelor of Science Degree in Agricultural Mechanization. I have completed much
- of the course work required for a Master's Degree in Agricultural Engineering at the
- 16 University of Missouri Columbia. I am qualified as an Engineer-in-Training under
- the laws of the State of Missouri.
- 18 Q. PLEASE DESCRIBE YOUR PROFESSIONAL BACKGROUND AND
- 19 **EXPERIENCE.**
- 20 A. In February 1983, I joined the Staff of the Missouri Public Service Commission as a

Rate Engineer. My responsibilities included analyzing and making recommendations relating to purchased gas adjustment filings, actual cost adjustment filings, rate cases, certificate applications, intrastate pipeline applications and applications to establish new local distribution systems. I left the Missouri Public Service Commission in December 1994 to take a position with the New York State Electric and Gas Corporation ("NYSEG"). My responsibilities at NYSEG included establishing prices to be used in "repackaged" contract offerings, training co-workers and end-users with respect to the application of new rates and service concepts, and complying with Commission filing requirements, including the calculation and filing of the monthly gas cost adjustment filings with the New York Public Service Commission. I left NYSEG in April 1998 to take a position as Rates Manager with Citizens. In March 2004, I was promoted to Manager - Rates and Regulatory Affairs.

Q. WHAT ARE YOUR RESPONSIBILITIES AND DUTIES AS THE MANAGER - RATES AND REGULATORY AFFAIRS FOR CITIZENS?

I am responsible for various rate-related matters associated with the steam utility operated by Citizens, including the annual filings for approval of a fuel cost adjustment. I also am responsible for the development of the gas cost adjustment filings, miscellaneous tariff filings, special contracts, and numerous other rate-related activities for the gas utility, including cost of service and rate design in general rate cases.

1	Q.	HAVE YOU PREVIOUSLY TESTIFIED BEFORE ANY REGULATORY
2		AGENCIES?
3	A.	Yes. I testified before this Commission on numerous occasions, including in Cause
4		Nos. 41969-FAC01-FAC06, 41969-FAC03(S1), 41969-FAC06(S1), 41605, 41824,
5		42578, 42726, 42767, 43025, 37399-GCA68, 37399-GCA68(S1), 37399-GCA69, and
6		37399-GCA77. I also have testified before the Missouri Public Service Commission
7		relating to rates, tariffs, and certificate applications.
8		Background
9	Q.	WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS
10		PROCEEDING?
11	A.	The purpose of my direct testimony is to describe and provide support for certain
12		proposed changes to Citizens' rate tariffs and Terms and Conditions for Steam
13		Service. Included among the tariff changes addressed in my testimony is a proposed
14		change from the existing annual Fuel Adjustment Calculation ("FAC") to a quarterly
15		FAC. I also am sponsoring the revised Terms and Conditions for Steam Service, as
16		well as supporting documentation for the change in filing frequency of the FAC.
17	· Q .	PLEASE SUMMARIZE THE PROPOSED CHANGES TO THE RATE
18		TARIFFS.
19	A.	Most of the proposed modifications to the rate schedules were made to reflect the
20		changes described in the testimony of Petitioner's Witnesses Kerry Heid and LaTona

Prentice. These changes include: rate design modifications, increased rates to reflect the recovery of the proposed revenue requirement and other cosmetic or "housekeeping" type changes. Petitioner's witness Kerry Heid will sponsor red-lined and clean versions of Citizens' rate tariffs illustrating the phase one and phase two changes Citizens is proposing in this proceeding. One proposed change to the rate schedules, which I will discuss in my testimony, is the shifting of the base cost of fuel out of the Energy Charges and the movement of such costs to the FAC. If approved, this proposed change would result in all fuel cost being recovered through the FAC.

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9 Q. PLEASE SUMMARIZE THE PROPOSED CHANGES TO CITIZENS' 10 TERMS AND CONDITIONS FOR STEAM SERVICE.

A. Citizens is proposing to update its miscellaneous charges, as well as the interest on deposit and budget billing language. Citizens also is proposing to modify the language associated with seasonal disconnects and a few other cosmetic and "housekeeping" changes. My testimony will specifically discuss the proposed changes to Citizens' Terms and Conditions for Steam Service.

Quarterly FAC

17 Q. WHY IS CITIZENS PROPOSING TO CHANGE THE FILING OF THE FAC 18 FROM ONCE PER YEAR TO FOUR TIMES PER YEAR?

19 A. The main reason for this proposed change is to place FAC rates in effect that more 20 accurately reflect the cost and mix of fuels utilized to generate the steam used by

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Petitioner's Exhibit CAJ
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customers. Currently, the FAC changes once per year in June. At best, Petitioner must predict fuel mixes and prices up to 16 months in advance (from January of one year until May of the following year) in an annual FAC. For instance, the FAC Citizens is proposing be effective as of June 1, 2007 in FAC07 was developed based on the reconciliation of activity that occurred from February 1, 2006 through January 31, 2007 and a forecast was made in late-January or early-February for future activity through May 2008, some 15 or 16 months later.

Due to the volatility in fossil fuel prices experienced over the last few years, accurately predicting the price and mix of fuel sources 16 months in advance is challenging. As a result, the variance between fuel costs estimates and actual costs has continued to increase and variance recovery is a substantial portion of the current FAC rates. Under the current conditions, I would expect predicting the correct price and mix of fuel sources on an annual basis to continue to be a challenge in the foreseeable future.

Filing the FAC on a quarterly basis will permit Petitioner to use more current price estimates and allow changes in the mix of fuels to be reflected in fuel cost projections on a more timely basis. As a result, the price customers pay for steam will be more indicative of the cost of producing and purchasing that same steam. Currently, the rates are based on estimated costs calculated up to 16 months earlier and include variances from up to 28 months earlier, resulting in price signals which

are not accurate.

A.

Q. WHAT FACTORS CAUSED CITIZENS TO REQUEST THAT THE FAC PROCESS BE CHANGED TO A QUARTERLY FILING?

As shown by the historical FAC factors set forth in the attached Petitioner's Exhibit CAJ-1, the FAC rates were reasonably stable. Several years ago, however, national fuel costs began to increase dramatically. Coal prices increased from approximately \$20 per ton to over \$40 per ton. Recent emission standards and resulting constraints have required Citizens to make substantial adjustments to the way energy is used and the type and quantity of fuel it is allowed to burn. Natural gas prices also have increased from approximately \$2 per Dth to nearly \$8 per Dth, and in some cases more than \$10 per Dth. The cost of energy, in general, has skyrocketed. The market price of a barrel of oil has increased from less than \$25 per barrel to over \$60 per barrel. Additionally, in today's market, energy prices can change in an extreme manner, both in terms of speed and magnitude.

Adding to the impact of the price of the individual fuel is the type of fuel utilized to meet any increased load during cold periods. Citizens uses the least expensive fuel sources first. When a cold spell occurs, the incremental increase in load generally is met with more expensive sources of fuel. Petitioner's need for this additional and more expensive fuel typically occurs at the same time energy prices are peaking.

1	0	WHAT	HAVE	CITIZENS'	VARIANCES	REEN	OVER	THE	LAST	FEX
1	Ų.	*** 11 ** 1	LIAYL	CITIZENS	VAIMANCES	DEFE	OVER	I III	LAGI	T. T. AA

2 YEARS?

- A. I summarized the variances reflected in Citizens' FAC filings during the last 13 years in Petitioner's Exhibit CAJ-2. As the Exhibit shows, the variances have become rather large and appear to be continuing this upward trend. Each year Citizens filed a FAC, the utility believed reasonable estimates and assumptions were used to calculate the FAC amount so variances would be minimized. Each year, however, subsequent changes to fuel prices and fuel mixes resulted in substantial variances, resulting in large variances which do not benefit the customers or Citizens.
- 10 Q. WHY DOESN'T CITIZENS ESTIMATE HIGHER FUEL COST IN ORDER
 11 TO LOWER THE RISK OF UNDER-RECOVERY?
- 12 A. Citizens prefers to make realistic estimates based on available facts as of the time the
 13 estimate is made in order to keep the cost of the energy provided to customers as
 14 competitive as possible. While over-estimating may help reduce the variance,
 15 Citizens would prefer changing the FAC rates more frequently to maintain market16 based prices at any given time of year. In my opinion, an FAC filing performed and
 17 filed with the Commission more frequently would better serve Citizens and its
 18 customers.
- 19 Q. WHAT TYPES OF EVENTS MAKE FORECASTING FUEL PRICES AND
 20 FUEL MIXES SO DIFFICULT?

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Typically, there is no one event that stands out as the key challenge. Variances between fuel costs estimates and actual costs most commonly are caused by a combination of events. Obviously, a large change in the cost of any individual fuel will result in a variance. In addition to the cost of fuel, the quantity of the fuel purchased could result in a variance, especially if the timing is such that increased fuel needs must be met with a more expensive fuel source. An example of this situation occurred in February 2007, when the weather was 32% colder than normal.

A.

Citizens maximizes its use of the least expensive fuel sources (i.e., coal and Coke Oven Gas ("COG")) and purchased steam from Covanta at its steam facility. Coal is one of the least expensive fuels and is used to the maximum extent economically and physically possible. However, if the supply of coal or the capacity to utilize coal becomes limited for any reason and the load cannot be met with Covanta steam or COG, additional load is achieved by using natural gas or oil, both of which are more expensive sources of fuel. Some past limitations on coal supply include: frozen coal, wet coal and delays in train deliveries (occurring either at the mine or in transit).

Day-to-day operation of the plant is designed to utilize the energy sources in the most cost effective manner. A deviation from the forecasted energy plan (except those resulting in load reductions) will increase costs. A couple of examples of these types of events include; (1) unexpected boiler shut downs of the facility if the shut down requires an increased utilization of a more expensive fuel and (2) unexpected interruptions in the flow of steam generated by the Covanta facility. These interruptions may be caused by problems encountered by Covanta accessing the fuel (trash) used to generate steam or a decreased supply of trash due to weather or other factors. An unexpected maintenance issue at the Covanta facility also could create an interruption in the supply of steam.

A.

Occasionally, supplies of COG may be limited as well. This generally will require more natural gas or oil to be used if Citizens' load requirements cannot be met by additional coal or Covanta steam. COG supply can be limited if the Manufacturing Division plant reduces the amount of coke it is producing or has an unexpected maintenance issue.

Q. HOW WILL A QUARTERLY FAC BENEFIT CITIZENS AND ITS CUSTOMERS?

Filing quarterly FACs is expected to provide a number of benefits, one of which is better pricing signals. By changing the price of steam through a quarterly filing, winter prices will better reflect the cost of producing steam during those months, which is when production costs are highest. In the summer, when the production cost is the lowest, the price will be lower. Any changes in the mix of fuel will be easier to identify earlier and can be reflected more accurately in the FAC when changes are warranted. Also, any dramatic shift in fuel costs can be recognized and built into

rates on a more timely basis (whether the shift results in an increase or decrease in cost). A quarterly FAC also will provide the customer with a more timely indicator of fuel costs, as compared to collecting (or crediting) any variance up to 28 months after the fact.

PLEASE DESCRIBE ANY SUBSTANTIAL DIFFERENCES IN THE WAY Q. YOU ARE PROPOSING TO CALCULATE THE QUARTERLY FAC 6 COMPARED TO THE CURRENT ANNUAL FAC. 7

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Aside from performing the calculation quarterly instead of annually, Citizens is not proposing any substantial changes to the process of calculating the FAC. primary advantage of frequent FAC filings is the reduction in the intervening time period between when rates are calculated and the months during which they are effective. Additionally, the forecasted fuel mix used to generate the rates will be based on data that is no more than six months old as compared to the current annual FAC process, which uses forecasted data that is at least 15 to 16 months old. Citizens is proposing to use a calculation process that is similar to the one utilized for the annual FAC, with the exception of using more timely and accurate forecasting data and pricing information.

The transition from an annual to quarterly FAC will require some modifications, on an interim basis, to the actual process during a "transitional period." Citizens would propose to file its quarterly FACs during the months in which its not

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filing gas cost adjustments ("GCAs") for the Gas Division. This may require the first quarterly FAC filing to be effective over a period of less than three full months. Citizens also will distribute the prior period outstanding variance over four future quarters. For the first quarterly FAC, a full 12 to 14 month prior period variance would be distributed over four quarters. After the first quarterly FAC, all future variances would be for the prior three month period and be distributed over four future quarters for recovery.

Q.

The price of steam will vary from quarter-to-quarter rather than being one price all year long. The benefit of price movement throughout the year is it provides customers with more accurate pricing signals. During the winter months, more natural gas is utilized to meet system needs. This has the effect of increasing the average cost of steam generated during the winter. If the winter is colder than normal, the higher average cost used to estimate the quarterly FAC will result in a smaller under-collection when comparing the lower *annual* average cost, which would have been used to estimate the annual FAC. Conversely, the quarterly FAC could potentially reduce customer bills and over-collections during a warmer than normal winter.

- CAN YOU PROVIDE AN EXAMPLE DEMONSTRATING HOW THE QUARTERLY FAC WOULD PRODUCE LESS OF AN UNDER-COLLECTION?
- A. Assume the average cost to generate steam for the winter quarter is \$0.50 per therm

and the cost of steam purchased and produced for the summer quarter (primarily met using Covanta generated steam and less expensive fuel sources, *i.e.*, coal and COG) is \$0.20. If one customer was on the system and used 100 therms in a winter month and 20 therms in a summer month, the total cost to serve the customer is \$54 (100 x \$0.50 plus $20 \times \$0.20 = \54). The average annual cost of steam is \$0.45 per therm for this customer (\$54 / 120 therms = \$0.45 per therm).

Assume a very cold weather occurs during the same winter month. The cost to generate the steam will increase over the assumed \$0.50 per therm rate. Since Citizens maximizes the use of its least expensive resources first, the more expensive sources of steam would be available to meet the additional load. The additional load would be met with natural gas or oil, both of which are more expensive fuel sources. Assuming the fuel cost was \$0.60 per therm and that the customer's usage increases to 120 therms during the winter month, Citizens' cost to serve the customer is \$76 (120 x \$0.60 plus 20 x \$0.20 = \$76), which equates to approximately \$0.54 per therm.

Under the above scenario, the annual FAC would be \$0.45 per therm, which was the average *annual* cost of steam. The cold winter month would have resulted in the cost of steam increasing to \$0.54 per therm -- an under-collection of \$12.60 for the year ($$0.54 - $0.45 = 0.09×140 therms = \$12.60). With a quarterly FAC in place, the under-collection would be \$12.00 ($$0.20 - $0.20 = 0.00×20 therms plus $$0.60 - $0.50 = 0.10×120 therms = \$12.00). This is a simple example, but it

demonstrates how a quarterly FAC could reduce over-collections (and undercollections) even if Citizens did not improve its estimates of costs in the shorter 3 to 6
month timeframe compared to a minimum of 16 months for an annual FAC – which
in my opinion is unlikely.

Q. HAVE YOU PREPARED AN EXHIBIT SHOWING HOW THE QUARTERLY
FAC WILL BE CALCULATED?

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Yes, workpapers depicting how the quarterly FAC is calculated are attached as Petitioner's Exhibit CAJ-3. The workpapers and methodology are modeled after the annual FAC, with only three months of forecasted data and actual usage in each quarterly filing. I have included one quarterly FAC calculation as an example. I have removed the reference to the base cost of gas in the worksheets, which will be discussed later in my testimony.

Other Changes to Citizens' Tariffs and Terms and Conditions for Steam Service

Q. WHAT OTHER CHANGES IS CITIZENS PROPOSING TO ITS TARIFFS?

Aside from revisions required by the cost of service study prepared by Petitioner's Witness Heid, Citizens is proposing only a few additional minor revisions. One proposed revision is the removal of the references to a "condensate rider" from Citizens' tariffs. Citizens proposes to include "condensate" language in individual customer contracts if the service becomes applicable to any new customers. Currently, no customers are benefiting from the "condensate rider" and the conditions

needed to allow Citizens to provide any credit to customers as the result of condensate being returned to the utility would require special contractual provisions. Accordingly, the service is more conducive to customer specific arrangements. Any new customer specific contract would be subject to Commission approval.

One other change to be reflected in Petitioner's proposed tariffs is the shift of base fuel costs from the base rate tariffs to the FAC. This change would result in Citizens' steam tariffs reflecting fuel costs in a manner similar to the Gas Division and allows the margin portion of Citizens' base rates to be easily identifiable. The change also will result in all fuel costs being included in the FAC, which is a much more accurate reflection of how costs are incurred and should aid the customer in understanding what costs contribute to their total steam bill. As a result of the proposed change, Standard Contract Rider No. 1 also will be changed to reflect the fact that it will recover all fuel costs – including base fuel costs. Standard Contract Rider No. 1 also will be modified to reflect the change from an annual FAC to a quarterly FAC. A draft of the revised Contract Rider No. 1 will be included in the Exhibits of Petitioner's Witness Heid.

Q. PLEASE IDENTIFY PETITIONER'S EXHIBITS CAJ-4 AND CAJ-5.

A. Petitioner's Exhibits CAJ-4 and CAJ-5 are copies of the proposed revised Terms and Conditions for Steam Service. Exhibit CAJ-4 is a revised version of the Terms and Conditions for Steam Service with all changes accepted ("clean version") and Exhibit

1 CAJ-5 is a version with all changes reflected in redline format for easier identification
2 ("redline version").

Q. WHAT CHANGES IS CITIZENS PROPOSING TO ITS TERMS AND CONDITIONS FOR STEAM SERVICE?

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A.

Most of the proposed changes are designed to make Citizens' Terms and Conditions for Steam Service more similar to the Gas Division's Terms and Conditions. Many of the services offered by the Steam Division and Gas Division are provided by the same personnel and equipment. Moreover, many steam customers also are Gas Division customers. Making the Terms and Conditions for Service of the two utilities consistent, is expected to reduce confusion and make the provision of services to gas and steam customers more equitable.

Citizens proposes to modify the section relating to customer deposits so it is more consistent with the Gas Division — not only with respect to when deposits are required, but also as to how they are calculated (including reflecting the changes in interest rates the Commission approves each year by General Administrative Order). The proposed change will be more equitable for customers and Citizens, since the Commission-approved interest rates are based on market rates and will fluctuate, both up and down, as the market dictates.

Citizens also is proposing to revise the language relating to seasonal disconnects. Historically, certain customers have disconnected their steam service

during summer months when it is not in use. Summer disconnections are not economically viable from Citizens' perspective. Many fixed charges are allocated based on the results of a cost of service study. Those costs are then spread over 12 months for equitable recovery. Petitioner continues to incur these costs during the summer months. During the summer, Citizens still has meters in the field, billing and collection personnel are still employed, meter routes are still run, bills are still calculated and issued, etc. The customer that discontinues service in the summer still is costing Petitioner money. Unless these fixed costs are to be recovered over a 6-month period, Petitioner will incur stranded costs. Also, if those costs are based on a 6-month recovery time, those customers which are connected all year will be subsidizing those customers who discontinue service during the summer.

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In most jurisdictions, including in the tariffs of other Indiana utilities, this issue is addressed through disconnect provisions similar to those Citizens is proposing. If a customer disconnects for any period of time and reconnects within 12-months, it will pay the reconnect charge and all avoided monthly Facility Charges or demand charges.

Q. WHAT OTHER CHANGES IS CITIZENS PROPOSING TO MAKE TO ITS TERMS AND CONDITIONS?

19 A. Citizens also is proposing to change certain other miscellaneous charges.

20 Specifically, Citizens proposes to revise the late payment fee, the reconnect fee, the

Direct Testimony of Craig A. Jones
Petitioner's Exhibit CAJ
Citizens Thermal Energy
IURC Cause No. 43201
Page No. 17 of 18

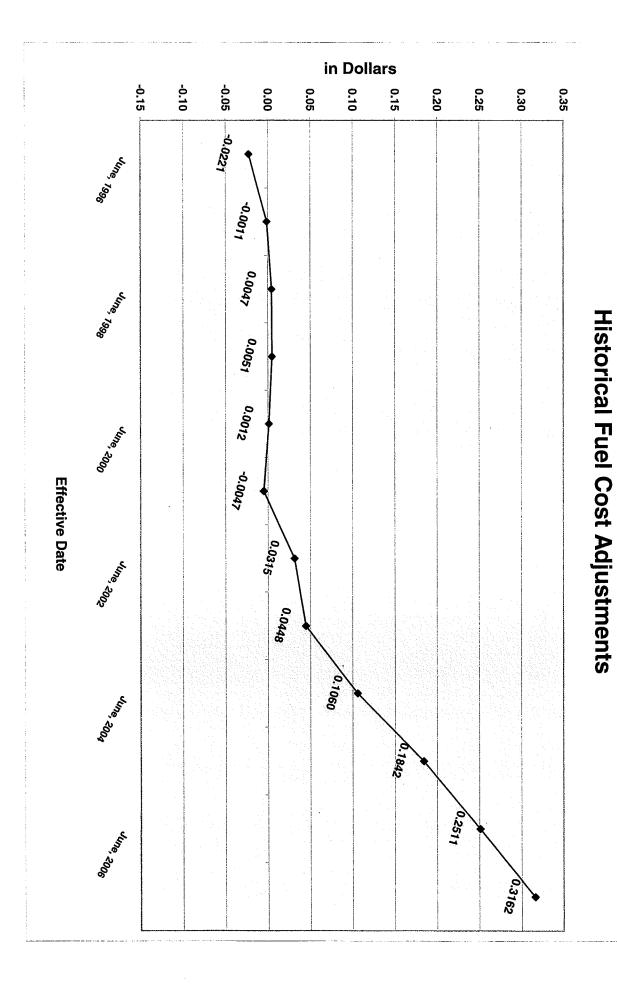
trip charge, fraudulent use charge and bad check charge to be consistent with the Gas Division's charges. Most of the personnel that would perform these activities do so for the Gas Division as well, and those activities that are not conducted by the same personnel for both regulated utilities are performed using similar processes and equipment. Moreover, the non-recurring charges on file for the Gas Division have been in effect for nearly 10 years, while costs have likely increased. Therefore, the proposed non-recurring charges should represent conservative charges. If in a later case, Citizens has more activity or in a later Gas Division filing the charges are recalculated, Citizens could propose to change the non-recurring charges of the steam division as well. Not revising these non-recurring charges in Petitioner's first rate case in 15 years would result in other customers paying for any short fall experienced by using the existing charges.

Citizens also is proposing to revise the language in its Terms and Conditions relating to the Budget Bill so it will be applicable to all customers. The existing language limits the Budget Bill option to residential customers only. The Steam Division has very few residential customers, therefore, the existing language limited the number of participants. Citizens has installed new billing software and will be able to offer the Budget Bill option to all customers, which should be a real benefit to a number of customers.

Direct Testimony of Craig A. Jones
Petitioner's Exhibit CAJ
Citizens Thermal Energy
IURC Cause No. 43201
Page No. 18 of 18

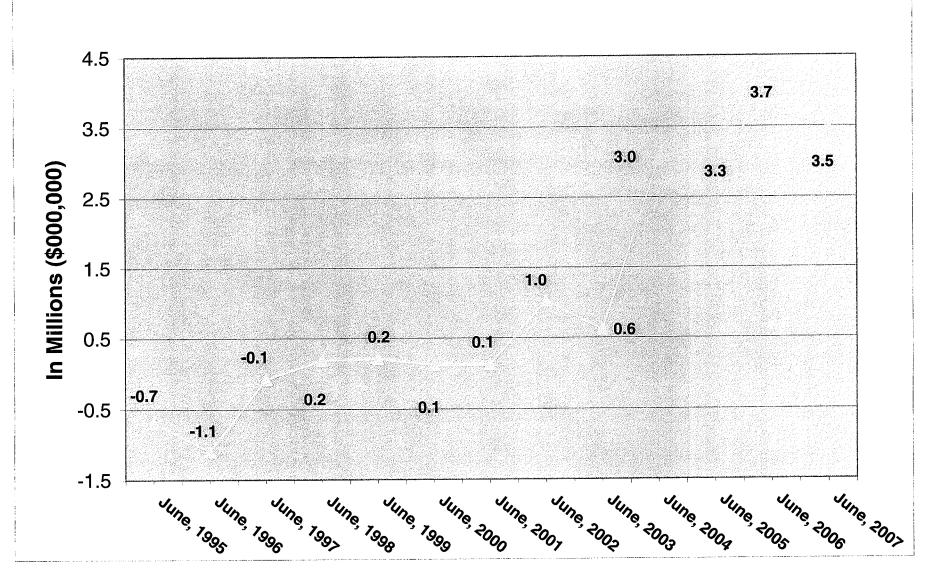
- 1 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY IN THIS
- 2 **PROCEEDING?**
- 3 A. Yes, it does.

1	
2	<u>VERIFICATION</u>
3	
4	STATE OF INDIANA)
5) ss:
6	COUNTY OF MARION)
7	
8	The undersigned, Craig A. Jones, under penalties of perjury and being first duly
9	sworn on his oath, says that he is Manager - Rates and Regulatory Affairs for Citizens
10	Thermal Energy; that he caused to be prepared and read the foregoing Direct
11	Testimony; and that the representations set forth therein are true and correct to the
12	best of his knowledge, information and belief.
13	
14	
15	Cray A Jans
16	
17	By: Craig A. Jones
18	Manager - Rates and Regulatory Affairs
19	Citizens Thermal Energy
20	
21 22	Subscribed and sworn to before me, a Notary Public, this and day of Much, 2007.
23	Subscribed and sworn to before me, a Notary Public, this of day of 1000 2007.
23 24	
25	Signature
26	
27	avita S. Walder)
28	Printed Name
29	
30	My Commission Expires: 4 2 2008
31	
32	My County of Residence: Johnsen
33	



Citizens Thermal Energy IURC Cause No. 43201 Petitioner's Exhibit CAJ-1





Citizens Thermal Energy IURC Cause No. 43201 Petitioner's Exhibit CAJ-3 Page 1 of 5

CITIZENS THERMAL ENERGY

Determination of Steam Fuel Cost Charge

Line . No.	Estimate for <u>Month</u>	Estimated Billed Therms (S)	Indiana Jurisdictional Sales (Th)		Estimated Fuel Cost	Estimated Purchases	Total Estimated Fuel Costs (F) (col. C + col. D)	(\$ per Therm) (F)/(S) (col. E / col. A)
		(A)	(B)		(C)	(D)	(E)	(F)
1	May 2007	4,671,173	4,671,173		\$544,346	\$726,474	\$1,270,820	
2	June 2007	3,669,163	3,669,163		925,210	548,266	1,473,476	
3	July 2007	3,819,417	3,819,417		847,095	707,316	1,554,411	
				•			· · · · · · · · · · · · · · · · · · ·	
4	Subtotal	12,159,753	12,159,753	\$	2,316,651 \$	1,982,056	\$ 4,298,707	
5	Total Variance (Sch. 12 B, line 23)						533,465	
6	Total Quarterly Fuel Costs (In 4 + In 5)					\$4,832,172	
7	Quarterly Sales subject to FAC - Therr	•					12,159,753	
8	Quarterly FAC costs per unit sales (In.	, , ,					12,100,100	\$0.39739
Ü	Quarterly I Ao costs per till sales (iii.	07 III. 77						Ψ0.53153
9	settlement credit of 0 divided by sales	for 1/			<u>0</u> Th	erms =		0.00000
10	Adjusted Fuel Cost Factor (ln.8 + ln. 9))			_			\$0,39739
11	Fuel Cost Charge Adjusted for Indiana	Utility Receipts 1	ax (Line 10 ÷ (1-1.4%	IURT Rate))				0.40303

^{1/ -} FAC03S1 Settlement Credit to returned over the twelve months of June 2004 through May 2005. I have revised the credit to cover 14 months to sync up with the quarterly months for June 04 thru July 05

C:\Documents and Settings\skrohne.HHCLAW\Local Settings\Temporary Internet Files\OLKA1\[CAJ Exhibit 3 (2).xls]Revised Format Sch 1

CITIZENS THERMAL ENERGY

Reconciliation of Steam Actual Cost of Fuel Incurred To Applicable Retail Fuel Clause Revenues Billed Months of: November 2006 through January 2007

		Α	В	С	
Line		November 2006	Docombox 2006	tonuone 2007	
No.	Steam Sales Volumes (therms)	November, 2006	December, 2006	January, 2007	
1	Steam Rate No. 1	349,591	402,164	440,449	
2	Steam Rate No. 2	3,091,949	3,763,885	4,317,547	
		160,265		26,546	
3	Steam Rate No. 3B	•	57,776	•	
4	Special Contract	2,117,717	2,493,051	2,770,641	
5	Total Therm Sales (ln1+ln2+ln3+ln4)	5,719,522	6,716,876	7,555,183	
	Actual Cost of FAC related Fuel Incurred				
6	Cost of fuel per therm (Sch. 3)	\$0.48890	\$0.49771	\$0.49556	
7	Total cost of fuel incurred (In 5 * In 6)	\$2,796,274	\$3,343,056	\$3,744,046	
	Calculation of Base Cost of Fuel Recovered				
8	Base Cost of Steam per therm	\$0.21697	\$0.21697	\$0.21697	
9	Base Cost (In 5 * In 8)	\$1,240,965	\$1,457,361	\$1,639,248	
10	Incremental fuel costs (In 9 - In 11)	\$1,555,309	\$1,88 5,695	\$2,104,798	
	Calculation of FAC Recovery				
11	FAC rate Cause No. 41969-FAC K	\$0.25085	\$0.25085	\$0.25085	
12	FAC rate Cause No. 41969-FAC K	•	-	-	
	Actual incremental cost of fuel billed				
13	including Utility Gross Receipts Tax (In 5 * In 11)	\$1,434,742	\$1,684,928	\$1,895,218	
14	Actual incremental cost of fuel billed including Utility Gross Receipts Tax (In 5 * In 12)	•	-	-	
15	Actual incremental cost of fuel billed excluding Utility Gross Receipts Tax (In 13 or In 14 * (1 - 1.4%))	1,414,656	1,661,339	1,868,685	
	Variance from Cause No. 41969-FAC K				
16	(\$312,210 / 3)	104,070	104,070	104,070	104,070
	Variance from Cause No. 41969-				
17	(\$0/0)	-	-	-	•
	Refund				
18	(\$0)				
19	Fuel cost recovered to be reconciled with incremental cost incurred (ln15- ln 16 - ln 17 + ln18)	\$1,310,586	\$1,557,269	\$1,764,615	
20	Fuel cost variance (over)/under recovery (In 10 - In 19)	\$244,723	\$328,426	\$340,183	

CITIZENS THERMAL ENERGY

Determination of Steam Actual Cost of Fuel for November, 2006 through January, 2007

Line No.	Descr	iption	
	For Month of:	November, 2006	
1	Billed Therms	110101111011111111111111111111111111111	5,719,522
2	Sales (S)		5,719,522
3	Fuel Cost		\$1,726,889
4	Purchases		1,069,364
5	Total Fuel Costs (F)		\$2,796,253
6	Cost of Fuel (F ÷ S)		\$0.48890
	For Month of:	December, 2006	
7	Billed Therms		6,716,876
8	Sales (S)		6,716,876
9	Fuel Cost		\$1,905,361
10	Purchases		1,437,663
11	Total Fuel Costs (F)		\$3,343,024
12	Cost of Fuel (F ÷ S)		\$0.49771
	For Month of:	January, 2007	
13	Billed Therms		7,555,183
14	Sales (S)		7,555,183
15	Fuel Cost		\$2,415,445
16	Purchases		1,328,612
. 17	Total Fuel Costs (F)		\$3,744,057
18	Cost of Fuel (F ÷ S)		\$0.49556

Months of: November 2006 through January 2007 Allocation of Actual Fuel Cost Variances

Line No.			
	Calculation of Total Fuel Cost Variances		
1 2 3	November, 2006 (Sch. B2, pg. 1, ln. 19) December, 2006 (Sch. B2, pg. 1, ln. 19) January, 2007 (Sch. B2, pg. 1, ln. 19)		\$244,723 328,426 340,183
4	Total Variance this Cause		\$913,332
		Α	B Variance
	Distribution of Variances to Quarters	Sales %	(in 14 * col. A)
5	May 2007 - Jul. 2007	18.4413% (Sch. 2, In 18)	\$168,430
6	Aug. 2007 - Oct. 2007	18.0675% (Sch. 2, In 19)	\$165,016
7	Nov. 2007 - Jan. 2008	34.0258% (Sch. 2, ln 20)	\$310,769
8	Feb. 2008 - Apr. 2008	29.4654% (Sch. 2, In 21)	\$269,118
	Calculation of Variances for this Cause		
9	Cause No. 41969 - FAC J		\$196,958
10	Cause No. 41969 - FAC K		67,466
11	Cause No. 41969 - FAC L		100,611
12	This Cause (In 15)		168,430
13	Total Variance to be Included in FAC (Over)/Underrecovery	. •	\$533,465

Citizens Thermal Energy Estimated Sales Volume for Eleven Months Ending April 30, 2008

Line No.	Month	Total Sales Volume Subject To FAC (Therms)
1	May 2007	4,671,173
2	June 2007	3,669,163
3	July 2007	3,819,417
4	Third Quarter	12,159,753
5	August 2007	3,252,320
6	September 2007	4,265,944
7	October 2007	4,394,990
8	Third Quarter	11,913,254
9	November 2007	5,697,920
10	December 2007	7,527,354
11	January 2008	9,210,466
12	Third Quarter	22,435,740
13	February 2008	7,089,134
14	March 2008	6,641,889
15	April 2008	5,697,682
16	Fourth Quarter	19,428,705
17	Total Sales - Therms	65,937,452
	Quarterly Sales Allocation Factor	
18	First Quarter (In 4 / In 17)	18.4413%
19	Second Quarter (In 8 / In 17)	18.0675%
20	Third Quarter (In 12 / In 17)	34.0258%
21	Fourth Quarter (In 16 / In 17)	29.4654%
22	Total (in 18 + in 19 + in 20 + in 21)	100.0000%

STEAM SERVICE TARIFF RATES, TERMS AND CONDITIONS FOR STEAM SERVICE WITHIN MARION COUNTY, INDIANA

Issued By The

City of Indianapolis, By and Through its Board of Directors for Utilities of its Department of Public Utilities
Doing Business As
Citizens Thermal Energy
2020 North Meridian Street
Indianapolis, Indiana 46202

James A. Wade President of Board of Directors Carey B. Lykins
President, and
Chief Executive Officer

STEAM TERMS AND CONDITIONS I.U.R.C. CAUSE NO. 43201

EFFECTIVE:

ORIGINAL PAGE NO. 2

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TERMS AND CONDITIONS FOR STEAM SERVICE

The rules set forth in these terms and conditions for steam service have been filed with and approved by the Indiana Utility Regulatory Commission, to provide a uniform and equitable basis upon which the transactions between the Utility and its Customers are conducted.

Citizens Thermal Energy 2020 N. Meridian St. Indianapolis, IN 46202

ORIGINAL PAGE NO. 4

DEFINITIONS

BTU -

British thermal unit.

BILLING DEMAND -

That Demand, stated in Therms/hour, upon which the demand charge in the bill is determined in any given Month.

BUDGET PLAN -

The policy and practice referenced in rule No. 17 of these terms and conditions for steam service.

CUSTOMER -

Any person corporation, municipality or other government agency which has agreed, orally or otherwise, to pay for steam service from the Utility.

DELINQUENT BILL -

A bill that has remained unpaid for the period set forth in rule No. 16 of these terms and conditions for steam service.

DEMAND -

The rate at which energy is taken by the Customer from the Utility's system in any given interval of time. It is usually in Therms/hour.

EDR -

Equivalent Direct Radiation – The total of all equipment connected to a Customer's steam system expressed as its equivalent in square feet of direct radiation.

ENTHALPY -

BTU's per pound of steam.

M POUND -

One thousand pounds

MAXIMUM DEMAND -

As applied in the Utility's rate, it is the greatest amount of energy taken by the Customer from the Utility's system in any given interval of time. (Usually stated as the Maximum Demand in any thirty (30) minute interval in a

given Month, or in the year).

MONTH -

One-twelfth (1/12) of a year, or the period between two (2)consecutive readings of the Utility's meters, as nearly every

thirty (30) days as practicable.

SERVICE CLASSIFICATION - Refers to energy characteristics; (pressure, temperature,

enthalpy, and the like.)

THERMS -

100,000 BTU's.

UTILITY -

Citizens Thermal Energy, 2020 North Meridian Street,

Indianapolis, Indiana 46202.

YEAR -

The calendar year from January 1 through December 31 of

any year, unless some other period is specified.

1. RATES AND UNIFORM CONDITIONS OF SERVICE

- 1.1 A copy of all rates and these terms and conditions under which steam service will be supplied, is on file with the Indiana Utility Regulatory Commission and may be inspected by the public in the principal office of the Utility, at 2020 North Meridian Street, Indianapolis, Indiana 46202.
- 1.2 All of the steam service furnished by the Utility shall be subject to said rates and these terms and conditions for steam service, which are by reference made a part of all standard contracts for service, (except when modified by special contract approved by the Indiana Utility Regulatory Commission), and are at all times subject to revision, change, modification or cancellation by the Indiana Utility Regulatory Commission of Indiana.
- 1.3 Where applicable, the Customer, upon written application, may change from one rate to another once during the first contract year, effective retroactively to the date of connection, and once at the end of each twelve (12) Month period thereafter, but not effective retroactively.

2. WRITTEN CONTRACT REQUIRED

- 2.1 A written contract properly executed may be required before the Utility is obligated to supply service. The Utility may reject any application where service is not available within the provisions of the "availability" clause of the applicable rate, or on account of unpaid bills or for any other valid reason.
- 2.2 A special contract will be required in any case of unusual generating plant or distribution mains requirement, high investment compared with the anticipated revenue, or other abnormal condition. The term of the contract shall be for such term as the parties may agree upon, being appropriate to the circumstances, but in no case less than three years. The contract shall be subject to the approval of the Indiana Utility Regulatory Commission of Indiana.

3. MODIFICATION AND ASSIGNMENT OF CONTRACT

3.1 No promise, agreement or representation of any agent of the Utility, made either before or after the signing of the contract, shall be binding upon the Utility, unless the same shall have been incorporated in the contract in writing, before the contract is signed and accepted by an authorized officer of the Utility.

4. ASSIGNMENT OF CONTRACT

4.1 In the event of the sale of the premises served or of any assignment of the lease of the same, the Customer may, with the written consent of the Utility, assign the service agreement to the purchaser or assignee.

5. GUARANTEE OF PAYMENT, DEPOSIT

- 5.1 The Utility may require Customers or applicants for steam services to make a cash deposit at any time to assure payment of bills, and as a condition of receiving or continuing to receive steam service. Such deposit shall not be less than forty dollars (\$40.00), nor more than the amount of the bill for any three (3) consecutive months known or estimated to have the highest steam consumption. The Utility shall determine the appropriate deposit.
- 5.2 Interest on any deposit held by the Utility on February 2, 2006 earned an interest rate of six percent (6%) per annum from the date of receipt by the Utility through February 2, 2006. Effective February 3, 2006, any deposit held for more than thirty (30) days will earn interest calculated monthly at the authorized rate of interest for the current month from the date the deposit is paid in full to the Utility. The rate of interest for each calendar year will be established by the Indiana Utility Regulatory Commission in a General Administrative Order.
- 5.3 Deposits from Customers will be refunded after the Customer has established an acceptable payment record. The deposit of any Customer who fails to establish an acceptable payment record may be retained by the Utility until steam services are discontinued.

5.4 Upon discontinuance of steam service, the deposit and earned interest, if any, will be applied to the payment of any outstanding bills. The unapplied portion, if any, of the deposit and earned interest will be refunded to the Customer. The Customer will be billed for any balance due the Utility. The balance of any deposit and interest, after being applied to any outstanding bills which cannot be returned to the Customer after termination of service, shall be reported and disposed of as required by the Uniform Disposition of Unclaimed Property Act (Indiana Code 32-9-1-1, et seq).

6. SERVICE APPLICATION, CHANGE OF OCCUPANCY, DISCONTINUANCE, ETC.

- 6.1 Upon termination of service, the Customer shall give at least three days written notice prior to the date disconnection is desired (unless some longer time is stated in the contract), to allow the Utility time to read its meter, the Customer being responsible for payment for steam used until the date of disconnection.
- 6.2 When reconnection of a service line is requested by a Customer within one (1) year following disconnection of steam service at the request of that Customer, a charge for restoration of steam service may be assessed. Such charge shall be the combination of:
 - a: \$44, and
 - b: The sum of the customer charges or demand charges, as set forth in the applicable rate schedule, for each Month the Customer's steam service was disconnected.

7. CONTRACT TERM

7.1 Unless some other term has been agreed upon by special contract, all contracts shall be made for the term provided for in the applicable rate.

Should the business served under a service contract be suspended or discontinued completely, due to causes beyond the control of the Customer, such as fire or accident (but not including strikes), the service contract, upon written request by the Customer and agreement by the Utility, shall be suspended and inoperative until the business is resumed, at which time all of the conditions of the service contract shall again become operative for the remainder of its term. However, if the Customer does not resume the Customer's use of the service within a reasonable time after such emergency suspension of the service contract (giving consideration to the investment in facilities made idle by such service suspension) the Utility may remove its meter and other facilities and shall not be obligated to reestablish the said facilities except under the condition of a new service contract.

8. LIMITATIONS OF THE USE OF STEAM SERVICE

- 8.1 Steam purchased from the Utility is for the exclusive use of the Customer, is to be used by the Customer for the purposes and at the premises described in the contract, and is not available for standby or auxiliary service.
- 8.2 Steam shall not be submetered by the Customer for resale.
- 8.3 The Utility may install flow restricting devices to limit the flow of steam to the amount provided for in the contract. In the case of heating Customers, where the contract provides for equivalent direct radiation, the maximum flow will be calculated based on one-third pound of steam per hour for each square foot of equivalent direct radiation.

9. FACILITIES FURNISHED BY THE UTILITY, SERVICE CONNECTIONS

- 9.1 The Utility will provide and maintain, at its expense, the service pipe from its main to a single point of supply just inside the wall of the building to be supplied, if such building abuts on the property line parallel to the main; otherwise to a point just inside the property line. In case the building does not abut on the property line parallel to the main, the Utility will extend the service pipe beyond the property line and into the building at the expense of the Owner or Customer, the location of such service pipe being the shortest convenient line from the Utility's main to the point of supply. The Utility will advise the Customer or his agent as to the location of such service pipe. The Utility will furnish and maintain a service valve, located at the point of supply. The Customer shall not use the Utility's service valve as a variable control device to regulate the flow within his system.
- 9.2 The Utility shall have the right to supply other premises through such service pipe, should it be deemed advisable, carrying the required piping therefore through the basement and walls of the Customer's building; all damage to walls, etc., being repaired without expense to the Customer. The right to extend such service pipe through the Customer's basement and walls shall be deemed a condition precedent to the Utility's obligation to serve such Customer.
- 9.3 In case of a building being supplied steam service by an extension of service pipe from an adjoining building, the expense of extending such service pipe shall be borne by the owner or occupant of the building for whose benefit such extension is made.
- 9.4 Any facilities required by the Customer in excess of the capacity and/or equipment considered by the Utility to be adequate, or any facilities to enable a duplicate supply, will be furnished entirely at the expense of the Customer.
- 9.5 The Utility shall be under no obligation to supply steam service where no public right-of-way and easement are available.

9.6 The Customer will be held responsible for payment of damage caused by himself, his agents or employees to any of the Utility's property located within his premises.

10. PROVISION FOR UTILITY'S METER, ETC.

- 10.1 All steam service shall be sold on a metered basis. Meters may register in Therms or be supplied with appropriate constants to convert the reading to Therms based on the Customer's Service Classification at normal operating conditions.
- 10.2 The Customer shall provide, free of expense to the Utility, an adequate location for the installation of the meter and accessory equipment, including facilities for disposing of any condensate, and shall provide the necessary connections and fittings for the meter, subject to the approval of the Utility, which, upon request, will furnish the Customer or his agent drawings of approved connections. The metering room or space and passage to it shall be kept accessible at all times; shall not be used for storage purposes and must be kept free of foreign material of any nature; it must be adequately ventilated to prevent excess heat buildup and protected from freezing during the winter.
- 10.3 No one who is not an agent or employee of the Utility, or otherwise lawfully entitled to do so, shall be permitted by the Customer to inspect, remove or tamper with meters, valves or appliances registering or controlling the steam supplied.

11. FACILITIES FURNISHED BY CUSTOMER

- 11.1 The original installation of the Customer's piping or apparatus and its operation, and subsequent changes therein, shall be subject to the Utility's approval, with respect to the metering of the steam supplied, the steam capacity required to serve the Customer and safety from injury to either the Utility's personnel or its property. The piping, of whatever nature, shall be so arranged and maintained that all of the steam delivered may be measured accurately or accounted for.
- 11.2 The Utility's agents or employees shall have free access to the premises of the Customer at all reasonable hours, to inspect the use of the steam with respect to the conditions of the contract; and to inspect and repair the service pipes, valves, meters, etc., which are the property of the Utility.

- 11.3 Steam Trap: Where a condensate meter is used, the Customer shall provide, install, and maintain in good repair a standard steam trap or traps, approved by the Utility and of sufficient capacity to drain the water of condensation from the Customer's piping without loss of steam. In the event these traps are not maintained in good repair by the Customer and the Utility discovers loss of steam, the estimated amount of the steam lost may be added to the Customer's bill in addition to metered consumption.
- 11.4 Condensate Receiver: Where a condensate meter is used, the Customer shall provide and install a receiver of sufficient capacity and radiating surface to cool the water of condensation and it shall be located so that the condensate may be measured accurately.
- 11.5 Vents: Where a condensate meter is installed in a gravity system, the Customer shall provide and install vents to indicate any escape of steam from the traps or stoppage of the meter, to consist of suitable lengths of pipe connected to the water seal or condensate receiver.
- 11.6 Open Jets: Where a condensate meter is used, open jets, or any other use of steam where the condensate is not collected, will only be permitted in extreme cases that are recognized by the Utility to be unavoidable. They will not be permitted in such case without prior written approval by the Utility. In such a case, the Utility's estimate of the quantity of steam used shall be accepted as correct and shall be included in the Monthly bill.

12. METERING

12.1 The Utility will install one metering installation of suitable design and capacity to enable the measurement and billing of each separate supply of steam according to the Service Classification applicable. Where the steam is supplied through more than one supply source, each supply shall be measured and billed separately, unless the Utility determines that conditions require the separate supplies, in which case the quantities will be added for conjunctive billing. Under no other circumstances may there be conjunctive billing.

- 12.2 The Customer shall be free to install meters at his expense for his own purposes, which shall not include resale or re-metering to others, but such meters shall in no way interfere with the accuracy of the Utility's billing meter or meters.
- 12.3 All meters installed by the Utility for billing are tested at regular intervals. Upon written request by the Customer, an additional test will be made of any such meter, but not more often than once each year, provided that if the registration shown by such test is within three percent of accuracy the Customer shall pay the entire cost of making the test. The Customer shall have the right to have a representative present at any special meter test it has requested.
- 12.4 Incorrect registration: When any meter test shows an average error of registration in excess of three percent, the billing quantities will be adjusted in accordance with the result of the test, for a period equal to one-half of the time since the last previous test, but not to exceed six Months.
- 12.5 Non-registration: In the event the meter fails to register, or if steam is used unmeasured during any period, or if the meter seal is broken, the Utility may estimate the quantity used during the period, basing the estimate upon consumption in similar preceding or subsequent periods or in corresponding periods in previous years, giving consideration to temperature or any other factor that would make the estimate more accurate.

13. CONTINUITY OF SUPPLY

13.1 The Utility will use reasonable diligence in providing a regular and uninterrupted supply of steam, but if the supply should be interrupted or fail by reason of accidents, strikes, legal process or procedure, Federal, State or Municipal action or interference, extraordinary repair or for any cause not within the control of the Utility, the Utility shall not be held liable for damage and such interruption or failure shall not invalidate any of the covenants of the contract.

14. UTILITY LIABILITY

14.1 It is expressly stipulated by the Utility and agreed to by the Customer that the Utility shall not be liable for any interruption of the supply of steam caused by defective piping owned by the Customer on his premises; or for damage or damages to the Customer or to third persons as a result of the use of the steam on the Customer's premises, unless due to willful default or neglect on the part of the Utility.

15. RIGHT TO DISCONTINUE SUPPLY

- 15.1 The Utility shall have the right to discontinue steam service without notice and remove any of its property from the Customer's premises without legal process, for any of the following reasons:
 - 1. To facilitate repair.
 - 2. For want of a supply of steam.
 - 3. Where the Customer is found to have been taking steam unlawfully or fraudulently or where the Utility's regulating or measuring equipment or other facilities have been tampered with.
 - 4. Where a dangerous condition is found to exist on the Customer's premises.
 - 5. By order of any court, the Indiana Utility Regulatory Commission or other duly authorized public authority.
- 15.2 The Utility may discontinue its service upon five days written notice, for any of the following reasons:
 - 1. For nonpayment of a Delinquent Bill.
 - 2. For violation of any of these terms and conditions for steam service.

- 3. For breach of the service contract.
- 4. Misrepresentation of facts upon which the Utility was induced to render services.
- 15.3 When the Utility's agents are unable to have safe and reasonable access during the Utility's normal business hours to any meter, for a continuous period of three (3) Months, the Utility may disconnect after five (5) days written notice, until suitable arrangements can be made for the regular Monthly reading of such meter.
- 15.4 Discontinuance of service, provided for in clauses 15.1, 15.2 and 15.3 above shall not, however, invalidate any of the covenants of the contract or these terms and conditions for steam service; and the Utility shall have the right to enforce any contract notwithstanding such discontinuance. In the event steam service has been cut off for other than necessary repairs, the Customer shall reimburse the Utility for the entire expense of reconnecting the service.

16. BILLS, PAYMENT OF BILLS

16.1 Steam service bills, including budget bills, are issued each Month that a payment is due as net bills. The net amount, as indicated on the bill, is due and payable upon receipt. If payment of the net amount is not received by the Utility or a bank duly authorized as a collection agent within seventeen (17) days after the bill is mailed to the Customer, the bill is delinquent. The Utility may add a late payment charge to a Customer's delinquent bills. Such charge will be ten percent (10%) of the first three dollars (\$3.00) and three percent (3%) of the amount in excess of three dollars (\$3.00). The net amount plus the late payment charge then becomes due. If the bill remains unpaid at the next billing date, a bill with a disconnect notice will be mailed to the Customer, requiring payment of the delinquent amount within five (5) days of the mailing date. If such payment is not received by the expiration of such five (5) day period, service is thereafter subject to disconnection. Partial payments and payments on bills with disconnect notices will not be accepted by banks authorized as collection agents. When the due date falls on Saturday, Sunday or any legal holiday, the first business day thereafter shall be the due date. Failure to receive a bill shall not entitle the Customer to the net bill if he fails to make payment within the said seventeen (17) day prompt payment period, nor shall it affect the right of the Utility to discontinue service as provided above.

- 16.2 All billing adjustments or errors, including metering errors and incorrect tariff applications, may be adjusted to the known date of the error or for a period of one year, whichever period is shorter.
- 16.3 If the Utility is justified in discontinuing service to a Customer at one location, the Utility shall have the right to transfer unpaid charges to the same Customer at any other location at which the Utility is rendering service to such Customer, notwithstanding separate service contracts may be in effect for each location. Furthermore, the Utility, upon five (5) days advance written notice, shall have the right to discontinue its service to a Customer at any location to which the charges have been transferred because of such Customer's failure to pay such charges within the time prescribed in subsection 16.1 above.
- 16.4 All bill payments must be received in the office of the Utility or by a bank duly authorized as a collection agent on or before the stated due dates to avoid late payment charges and interruption of service.
- 16.5 When a trip to the Customer's premises is necessary to collect an unpaid bill or to disconnect service, a charge of fourteen dollars (\$14.00) per meter will be assessed to the Customer.
- 16.6 When service is disconnected for nonpayment of a bill, or whenever, for any reason beyond the control of the Utility, except acts of God, a reconnection of service is required by any Customer, a minimum charge of ten dollars (\$44.00) will be made by the Utility to cover a part of the cost of disconnection and reconnection of the service; except that the charge for any service reconnection at the request of a Customer after regular business hours or on Saturdays, Sundays or holidays, shall be charged at the actual cost incurred by the Utility. This charge together with any arrears due the Utility and any service deposit required by the Utility must be paid before the service is reconnected.

- 16.7 When a Customer issues a check to the Utility which is not honored by the bank, a charge of fourteen dollars (\$11.00) will be billed to the Customer for each such dishonored check.
- 16.8 When the Utility detects fraudulent or unauthorized use of steam, or the Utility's regulation, measuring equipment or other service facilities have been tampered with, the Utility may reasonably assume that the Customer or other user has benefited by such fraudulent or unauthorized use or such tampering and, therefore, is responsible for payment of: (1) the actual cost of the service used during the period such fraudulent or unauthorized use of tampering occurred or is reasonably assumed to have occurred, and (2) for the cost of field calls and the cost of effecting repairs necessitated by such use and/or tampering; or two hundred dollars (\$200.00), whichever is more. Under such circumstances, the Utility may disconnect service without notice and the Utility is not required to reconnect the service until a deposit and the above enumerated charges are paid in full.

17. BUDGET PLAN

A payment plan (Budget Plan) is available to steam Customers. The Monthly Budget 17.1 Plan payment is based on estimated annual charges divided into even monthly payments. The amount of the Monthly payment will be reviewed periodically and an adjustment made in the amount of the Monthly payment if the Utility determines that such adjustment is necessary. An adjustment in the Monthly payment also may be made at such time as there is an approved change in the Utility's service rates. To be placed on the Budget Plan, the Customer must make application to the Utility, either in writing or by telephone, and must execute, with the Utility, a Budget Plan Agreement. An account will not be placed on the Budget Plan if there is an outstanding balance due on that account. The Budget Plan Agreement will remain in effect so long as the Customer pays the Monthly budget payments on or before the due date or until the Customer requests to be removed from the Plan. Budget Plan Customers are subject to the same payment requirements as other Customers. A late charge will be added to any delinquent budget account. If a disconnect notice is issued to a Budget Plan Customer, the Customer will be removed from the Budget Plan and the full balance owing on the account will become due.

18. EXCLUSIVE SUPPLY OF INSTALLATION CONNECTED

18.1 No other source of steam shall be used by the Customer on the same installation in conjunction with the Utility's supply. Exceptions to the above may be made and covered under special contract provided adequate need exists and provisions are made to compensate the Utility for the capacity provided.

19. CONDENSATE RETURN

- 19.1 Any Customer located close to an existing Utility steam generating plant provided steam utility service may contract to return condensate to the Utility, at the Customer's expense and subject to facilities being available to receive and utilize Customer's condensate. The condensate shall be returned to the location on the Utility's premises specified by the Utility.
- 19.2 Any condensate returned must be of a quality acceptable to the Utility, as specified in the special contract, but in no case having a temperature of less than 140° F and a conductance of more than 25 micromhos. No contaminants such as volatile additives or amines may be present in the condensate returned.
- 19.3 In the event the Utility's equipment, in which the returned condensate is utilized, is retired from service no further condensate may be returned by the Customer.
- 19.4 Return of condensate is subject to a special contract which includes details providing the conditions under which the condensate may be returned.
- 19.5 Credit for condensate shall be specified in the Customer's contract and will not exceed five percent (5%) of the unit mass steam cost during each billing cycle for all condensate returned during such billing cycle which meets the quality standards specified in the special contacts.
- 19.6 The availability of this return condensate provision is restricted to Customers who can return condensate to the Utility hereunder at not less than an average of 30 gallons per minute (GPM).

STEAM SERVICE TARIFF RATES, TERMS AND CONDITIONS FOR STEAM SERVICE WITHIN MARION COUNTY, INDIANA

Issued By The

City of Indianapolis, By and Through its Board of Directors for Utilities of its Department of Public Utilities
Doing Business As
Citizens Thermal Energy
2020 North Meridian Street
Indianapolis, Indiana 46202

I.U.R.C. CAUSE NO. <u>43201</u>

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James A. Wade

President_of

Board of Directors

Chief Executive Officer

STEAM TERMS AND CONDITIONS

President, and

Carey B. Lykins

President, and

Chief Executive Officer

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TERMS AND CONDITIONS **FOR** STEAM SERVICE

The rules set forth in these terms and conditions for steam service have been filed with and	Deleted: se	
approved by the Indiana Utility Regulatory Commission, to provide a uniform and equitable		
basis upon which the transactions between the Utility and its Customers are conducted.	•	

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DEFINITIONS

BTU -

British thermal unit.

BILLING DEMAND -

That Demand, stated in Therms/hour, upon which the demand charge in the bill is determined in any given

Month.

BUDGET PLAN -

The policy and practice referenced in rule No.17 of these

terms and conditions for steam service.

CUSTOMER -

Any person corporation, municipality or other government agency which has agreed, orally or otherwise, to pay for

steam service from the Utility.

DELINQUENT BILL -

A bill that has remained unpaid for the period set forth in rule No. 16 of these terms and conditions for steam service.

DEMAND -

The rate at which energy is taken by the Customer from the Utility's system in any given interval of time. It is usually

in Therms/hour.

EDR -

Equivalent Direct Radiation - The total of all equipment connected to a Customer's steam system expressed as its

equivalent in square feet of direct radiation.

ENTHALPY -

BTU's per pound of steam.

M POUND -

One thousand pounds

MAXIMUM DEMAND -

As applied in the Utility's rate, it is the greatest amount of energy taken by the Customer from the Utility's system in any given interval of time. (Usually stated as the Maximum Demand in any thirty (30) minute interval in a

given Month, or in the year).

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STEAM TERMS AND CONDITIONS

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any year, unless some other period is specified.

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1. RATES AND UNIFORM CONDITIONS OF SERVICE

- 1.1 A copy of all rates and these terms and conditions under which steam service will be supplied, is on file with the Indiana Utility Regulatory Commission and may be inspected by the public in the principal office of the Utility, at 2020 North Meridian Street, Indianapolis, Indiana 46202.
- 1.2 All of the steam service furnished by the Utility shall be subject to said rates and these terms and conditions for steam service, which are by reference made a part of all standard contracts for service, (except when modified by special contract approved by the Indiana Utility Regulatory Commission), and are at all times subject to revision, change, modification or cancellation by the Indiana Utility Regulatory Commission of Indiana.
- 1.3 Where applicable, the Customer, upon written application, may change from one rate to another once during the first contract year, effective retroactively to the date of connection, and once at the end of each twelve (12) Month period thereafter, but not effective retroactively.

2. WRITTEN CONTRACT REQUIRED

- 2.1 A written contract properly executed may be required before the Utility is obligated to supply service. The Utility may reject any application where service is not available within the provisions of the "availability" clause of the applicable rate, or on account of unpaid bills or for any other valid reason.
- 2.2 A special contract will be required in any case of unusual generating plant or distribution mains requirement, high investment compared with the anticipated revenue, or other abnormal condition. The term of the contract shall be for such term as the parties may agree upon, being appropriate to the circumstances, but in no case less than three years. The contract shall be subject to the approval of the Indiana Utility Regulatory Commission of Indiana.

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3. MODIFICATION AND ASSIGNMENT OF CONTRACT

3.1 No promise, agreement or representation of any agent of the Utility, made either before or after the signing of the contract, shall be binding upon the Utility, unless the same shall have been incorporated in the contract in writing, before the contract is signed and accepted by an authorized officer of the Utility.

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4. ASSIGNMENT OF CONTRACT

4.1 In the event of the sale of the premises served or of any assignment of the lease of the same, the Customer may, with the written consent of the Utility, assign the service agreement to the purchaser or assignee.

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5. GUARANTEE OF PAYMENT, DEPOSIT

- 5.1 The Utility may require Customers or applicants for steam services to make a cash deposit at any time to assure payment of bills, and as a condition of receiving or continuing to receive steam service. Such deposit shall not be less than forty dollars (\$40.00), nor more than the amount of the bill for any three (3) consecutive months known or estimated to have the highest steam consumption. The Utility shall determine the appropriate deposit.
- Interest on any deposit held by the Utility on February 2, 2006 earned an interest rate of six percent (6%) per annum from the date of receipt by the Utility through February 2, 2006. Effective February 3, 2006, any deposit held for more than thirty (30) days will earn interest calculated monthly at the authorized rate of interest for the current month from the date the deposit is paid in full to the Utility. The rate of interest for each calendar year will be established by the Indiana Utility Regulatory Commission in a General Administrative Order.
- 5.3 Deposits from Customers will be refunded after the Customer has established an acceptable payment record. The deposit of any Customer who fails to establish an acceptable payment record may be retained by the Utility until steam services are discontinued.

Deleted: 5.1 A suitable credit arrangement, or a deposit of approximately two times the estimated mount of the Customer's bill in the Month of expected maximum consumption, may be required of any Customer before steam service will be supplied. The Utility will pay interest at the rate of 6% per annum on all deposits heretofore or hereafter made, for the period the deposit is retained as a guarantee of payment of bills, except that interest will not be paid for any period less than six Months and/or during any time after the service has been discontinued. No ¶

refund will be made on deposits being held due to a seasonal disconnect where the service is to be resumed following the seasonal disconnect period by the same Customer.¶

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Upon discontinuance of steam service, the deposit and earned interest, if any, will be applied to the payment of any outstanding bills. The unapplied portion, if any, of the deposit and earned interest will be refunded to the Customer. The Customer will be billed for any balance due the Utility. The balance of any deposit and interest, after being applied to any outstanding bills which cannot be returned to the Customer after termination of service, shall be reported and disposed of as required by the Uniform Disposition of Unclaimed Property Act (Indiana Code 32-9-1-1, et seq).

6. SERVICE APPLICATION, CHANGE OF OCCUPANCY, DISCONTINUANCE, ETC.

Upon termination of service, the Customer shall give at least three days written notice 6.1 prior to the date disconnection is desired (unless some longer time is stated in the contract), to allow the Utility time to read its meter, the Customer being responsible for payment for steam used until the date of disconnection.

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When reconnection of a service line is requested by a Customer within one (1) year following disconnection of steam service at the request of that Customer, a charge for restoration of steam service may be assessed. Such charge shall be the combination of:

a: \$44, and

b: The sum of the customer charges or demand charges, as set forth in the applicable rate schedule, for each Month the Customer's steam service was disconnected.

Deleted: 6.2 . When a Customer, who is using steam for seasonal heating, requests its disconnection and subsequently requests reconnection of the steam, the cost of such temporary disconnection and reconnection shall be borne by the Customer.

7. **CONTRACT TERM**

7.1 Unless some other term has been agreed upon by special contract, all contracts shall be made for the term provided for in the applicable rate.

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7.2 Should the business served under a service contract be suspended or discontinued completely, due to causes beyond the control of the Customer, such as fire or accident (but not including strikes), the service contract, upon written request by the Customer and agreement by the Utility, shall be suspended and inoperative until the business is resumed, at which time all of the conditions of the service contract shall again become operative for the remainder of its term. However, if the Customer does not resume the Customer's use of the service within a reasonable time after such emergency suspension of the service contract (giving consideration to the investment in facilities made idle by such service suspension) the Utility may remove its meter and other facilities and shall not be obligated to reestablish the said facilities except under the condition of a new service contract.

8. LIMITATIONS OF THE USE OF STEAM SERVICE

- 8.1 Steam purchased from the Utility is for the exclusive use of the Customer, is to be used by the Customer for the purposes and at the premises described in the contract, and is not available for standby or auxiliary service.
- 8.2 Steam shall not be submetered by the Customer for resale.
- 8.3 The Utility may install flow restricting devices to limit the flow of steam to the amount provided for in the contract. In the case of heating Customers, where the contract provides for equivalent direct radiation, the maximum flow will be calculated based on one-third pound of steam per hour for each square foot of equivalent direct radiation.

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9. FACILITIES FURNISHED BY THE UTILITY, SERVICE CONNECTIONS

- 9.1 The Utility will provide and maintain, at its expense, the service pipe from its main to a single point of supply just inside the wall of the building to be supplied, if such building abuts on the property line parallel to the main; otherwise to a point just inside the property line. In case the building does not abut on the property line parallel to the main, the Utility will extend the service pipe beyond the property line and into the building at the expense of the Owner or Customer, the location of such service pipe being the shortest convenient line from the Utility's main to the point of supply. The Utility will advise the Customer or his agent as to the location of such service pipe. The Utility will furnish and maintain a service valve, located at the point of supply. The Customer shall not use the Utility's service valve as a variable control device to regulate the flow within his system.
- 9.2 The Utility shall have the right to supply other premises through such service pipe, should it be deemed advisable, carrying the required piping therefore through the basement and walls of the Customer's building; all damage to walls, etc., being repaired without expense to the Customer. The right to extend such service pipe through the Customer's basement and walls shall be deemed a condition precedent to the Utility's obligation to serve such Customer.
- 9.3 In case of a building being supplied steam service by an extension of service pipe from an adjoining building, the expense of extending such service pipe shall be borne by the owner or occupant of the building for whose benefit such extension is made.
- 9.4 Any facilities required by the Customer in excess of the capacity and/or equipment considered by the Utility to be adequate, or any facilities to enable a duplicate supply, will be furnished entirely at the expense of the Customer.

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9.5 The Utility shall be under no obligation to supply steam service where no public right-of-way and easement are available.

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9.6 The Customer will be held responsible for payment of damage caused by himself, his agents or employees to any of the Utility's property located within his premises.

10. PROVISION FOR UTILITY'S METER, ETC.

- All steam service shall be sold on a metered basis. Meters may register in Therms or be supplied with appropriate constants to convert the reading to Therms based on the Customer's Service Classification at normal operating conditions.
- 10.2 The Customer shall provide, free of expense to the Utility, an adequate location for the installation of the meter and accessory equipment, including facilities for disposing of any condensate, and shall provide the necessary connections and fittings for the meter, subject to the approval of the Utility, which, upon request, will furnish the Customer or his agent drawings of approved connections. The metering room or space and passage to it shall be kept accessible at all times; shall not be used for storage purposes and must be kept free of foreign material of any nature; it must be adequately ventilated to prevent excess heat buildup and protected from freezing during the winter.
- No one who is not an agent or employee of the Utility, or otherwise lawfully entitled to do so, shall be permitted by the Customer to inspect, remove or tamper with meters, valves or appliances registering or controlling the steam supplied.

FACILITIES FURNISHED BY CUSTOMER 11.

- The original installation of the Customer's piping or apparatus and its operation, and 11.1 subsequent changes therein, shall be subject to the Utility's approval, with respect to the metering of the steam supplied, the steam capacity required to serve the Customer and safety from injury to either the Utility's personnel or its property. The piping, of whatever nature, shall be so arranged and maintained that all of the steam delivered may be measured accurately or accounted for.
- The Utility's agents or employees shall have free access to the premises of the Customer at all reasonable hours, to inspect the use of the steam with respect to the conditions of the contract; and to inspect and repair the service pipes, valves, meters, etc., which are

the property of the Utility.	
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11.3 Steam Trap: Where a condensate meter is used, the Customer shall provide, install, and maintain in good repair a standard steam trap or traps, approved by the Utility and of sufficient capacity to drain the water of condensation from the Customer's piping without loss of steam. In the event these traps are not maintained in good repair by the Customer and the Utility discovers loss of steam, the estimated amount of the steam lost may be added to the Customer's bill in addition to metered consumption.

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- 11.4 Condensate Receiver: Where a condensate meter is used, the Customer shall provide and install a receiver of sufficient capacity and radiating surface to cool the water of condensation and it shall be located so that the condensate may be measured accurately.
- 11.5 Vents: Where a condensate meter is installed in a gravity system, the Customer shall provide and install vents to indicate any escape of steam from the traps or stoppage of the meter, to consist of suitable lengths of pipe connected to the water seal or condensate receiver.
- 11.6 Open Jets: Where a condensate meter is used, open jets, or any other use of steam where the condensate is not collected, will only be permitted in extreme cases that are recognized by the Utility to be unavoidable. They will not be permitted in such case without prior written approval by the Utility. In such a case, the Utility's estimate of the quantity of steam used shall be accepted as correct and shall be included in the Monthly bill.

12. METERING

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12.1 The Utility will install one metering installation of suitable design and capacity to enable the measurement and billing of each separate supply of steam according to the Service Classification applicable. Where the steam is supplied through more than one supply source, each supply shall be measured and billed separately, unless the Utility determines that conditions require the separate supplies, in which case the quantities will be added for conjunctive billing. Under no other circumstances may there be conjunctive billing.

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- 12.2 The Customer shall be free to install meters at his expense for his own purposes, which shall not include resale or re-metering to others, but such meters shall in no way interfere with the accuracy of the Utility's billing meter or meters.
- 12.3 All meters installed by the Utility for billing are tested at regular intervals. Upon written request by the Customer, an additional test will be made of any such meter, but not more often than once each year, provided that if the registration shown by such test is within three percent of accuracy the Customer shall pay the entire cost of making the test. The Customer shall have the right to have a representative present at any special meter test it has requested.

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- 12.4 Incorrect registration: When any meter test shows an average error of registration in excess of three percent, the billing quantities will be adjusted in accordance with the result of the test, for a period equal to one-half of the time since the last previous test, but not to exceed six Months.
- 12.5 Non-registration: In the event the meter fails to register, or if steam is used unmeasured during any period, or if the meter seal is broken, the Utility may estimate the quantity used during the period, basing the estimate upon consumption in similar preceding or subsequent periods or in corresponding periods in previous years, giving consideration to temperature or any other factor that would make the estimate more accurate.

13. CONTINUITY OF SUPPLY

13.1 The Utility will use reasonable diligence in providing a regular and uninterrupted supply of steam, but if the supply should be interrupted or fail by reason of accidents, strikes, legal process or procedure, Federal, State or Municipal action or interference, extraordinary repair or for any cause not within the control of the Utility, the Utility shall not be held liable for damage and such interruption or failure shall not invalidate any of the covenants of the contract.

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STEAM TERMS AND CONDITIONS I.U.R.C. CAUSE NO. 43201

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14.	UTIL	ITY LL	IABILITY	
	14.1	shall no owned to third	expressly stipulated by the Utility and agreed to by the Customer that the Utility not be liable for any interruption of the supply of steam caused by defective piping d by the Customer on his premises; or for damage or damages to the Customer or rd persons as a result of the use of the steam on the Customer's premises, unless o willful default or neglect on the part of the Utility.	
15.	RIGI	нт то і	DISCONTINUE SUPPLY	
l	15.1	remov	Utility shall have the right to discontinue steam service without notice and we any of its property from the Customer's premises without legal process, for any e following reasons:	
		1.	To facilitate repair.	
		2.	For want of a supply of steam.	
		3	Where the Customer is found to have been taking steam unlawfully or fraudulently or where the Utility's regulating or measuring equipment or other facilities have been tampered with.	ection Break (Continuous)
		4.	Where a dangerous condition is found to exist on the Customer's premises.	
		5.	By order of any court, the Indiana Utility Regulatory Commission or other duly	

The Utility may discontinue its service upon five days written notice, for any of the

For violation of any of these terms and conditions for steam service.

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authorized public authority.

For nonpayment of a Delinquent Bill.

following reasons:

STEAM TERMS AND CONDITIONS

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- 3. For breach of the service contract.
- Misrepresentation of facts upon which the Utility was induced to render services.
- 15.3 When the Utility's agents are unable to have safe and reasonable access during the Utility's normal business hours to any meter, for a continuous period of three (3) Months, the Utility may disconnect after five (5) days written notice, until suitable arrangements can be made for the regular Monthly reading of such meter.
- 15.4 Discontinuance of service, provided for in clauses 15.1, 15.2 and 15.3 above shall not, however, invalidate any of the covenants of the contract or these terms and conditions for steam service; and the Utility shall have the right to enforce any contract notwithstanding such discontinuance. In the event steam service has been cut off for other than necessary repairs, the Customer shall reimburse the Utility for the entire expense of reconnecting the service.

16. BILLS, PAYMENT OF BILLS

16.1 Steam service bills, including budget bills, are issued each Month that a payment is due as net bills. The net amount, as indicated on the bill, is due and payable upon receipt. If payment of the net amount is not received by the Utility or a bank duly authorized as a collection agent within seventeen (17) days after the bill is mailed to the Customer, the bill is delinquent. The Utility may add a late payment charge to a Customer's delinquent bills. Such charge will be ten percent (10%) of the first three dollars (\$3.00) and three percent (3%) of the amount in excess of three dollars (\$3.00). The net amount plus the late payment charge then becomes due. If the bill remains unpaid at the next billing date, a bill with a disconnect notice will be mailed to the Customer, requiring payment of the delinquent amount within five (5) days of the mailing date. If such payment is not received by the expiration of such five (5) day period, service is thereafter subject to disconnection. Partial payments and payments on bills with disconnect notices will not be accepted by banks authorized as collection agents. When the due date falls on Saturday, Sunday or any legal holiday, the first business day thereafter shall be the due date. Failure to receive a bill shall not entitle the Customer to the net bill if he fails to make payment within the said seventeen (17) day prompt payment period, nor shall it affect the right of the Utility to discontinue service as provided above.

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STEAM TERMS AND CONDITIONS

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- 16.2 All billing adjustments or errors, including metering errors and incorrect tariff applications, may be adjusted to the known date of the error or for a period of one year, whichever period is shorter.
- 16.3 If the Utility is justified in discontinuing service to a Customer at one location, the Utility shall have the right to transfer unpaid charges to the same Customer at any other location at which the Utility is rendering service to such Customer, notwithstanding separate service contracts may be in effect for each location. Furthermore, the Utility, upon five (5) days advance written notice, shall have the right to discontinue its service to a Customer at any location to which the charges have been transferred because of such Customer's failure to pay such charges within the time prescribed in subsection 16.1 above.
- 16.4 All bill payments must be received in the office of the Utility or by a bank duly authorized as a collection agent on or before the stated due dates to avoid late payment charges and interruption of service.

16.5 When a trip to the Customer's premises is necessary to collect an unpaid bill or to disconnect service, a charge of fourteen dollars (\$44.00) per meter will be assessed to the Customer.

16.6 When service is disconnected for nonpayment of a bill, or whenever, for any reason beyond the control of the Utility, except acts of God, a reconnection of service is required by any Customer, a minimum charge of ten dollars (\$10.00) will be made by the Utility to cover a part of the cost of disconnection and reconnection of the service; except that the charge for any service reconnection at the request of a Customer after regular business hours or on Saturdays, Sundays or holidays, shall be charged at the actual cost incurred by the Utility. This charge together with any arrears due the Utility and any service deposit required by the Utility must be paid before the service is reconnected.

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16.6 When a trip to the Customer's premises is necessary regarding an unpaid bill or to disconnect service, a charge of five dollars (\$5.00) per meter will be made. ¶

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16.7 When a Customer issues a check to the Utility which is not honored by the bank, a charge of <u>fourteen dollars (\$11.00)</u> will be billed to the Customer for each such dishonored check.

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dishonored check.

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16.8 When the Utility detects fraudulent or unauthorized use of steam, or the Utility's regulation, measuring equipment or other service facilities have been tampered with, the Utility may reasonably assume that the Customer or other user has benefited by such fraudulent or unauthorized use or such tampering and, therefore, is responsible for payment of: (1) the actual cost of the service used during the period such fraudulent or unauthorized use of tampering occurred or is reasonably assumed to have occurred, and (2) for the cost of field calls and the cost of effecting repairs necessitated by such use and/or tampering; or two hundred dollars (\$200.00), whichever is more. Under such circumstances, the Utility may disconnect service without notice and the Utility is not required to reconnect the service until a deposit and the above enumerated charges are paid in full.

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17. BUDGET PLAN

A payment plan (Budget Plan) is available to steam Customers. The Monthly Budget Plan payment is based on estimated annual charges divided into even monthly payments, The amount of the Monthly payment will be reviewed periodically and an adjustment made in the amount of the Monthly payment if the Utility determines that such adjustment is necessary. An adjustment in the Monthly payment also may be made at such time as there is an approved change in the Utility's service rates. To be placed on the Budget Plan, the Customer must make application to the Utility, either in writing or by telephone, and must execute, with the Utility, a Budget Plan Agreement. An account will not be placed on the Budget Plan if there is an outstanding balance due on that account. The Budget Plan Agreement will remain in effect so long as the Customer pays the Monthly budget payments on or before the due date or until the Customer requests to be removed from the Plan. Budget Plan Customers are subject to the same payment requirements as other Customers. A late charge will be added to any delinquent budget account. If a disconnect notice is issued to a Budget Plan Customer, the Customer will be removed from the Budget Plan and the full balance owing on the account will become due.

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enter the Budget Plan after
commencement of the Budget Plan year
an initial payment must be made in the
amount of the estimated Monthly payment
times the number of Months since the
beginning of the plan year less the

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STEAM TERMS AND CONDITIONS I.U.R.C. CAUSE NO. 43201

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18. EXCLUSIVE SUPPLY OF INSTALLATION CONNECTED

18.1 No other source of steam shall be used by the Customer on the same installation in conjunction with the Utility's supply. Exceptions to the above may be made and covered under special contract provided adequate need exists and provisions are made to compensate the Utility for the capacity provided.

19. CONDENSATE RETURN

19.1 Any Customer located close to an existing Utility steam generating plant provided steam utility service may contract to return condensate to the Utility, at the Customer's expense and subject to facilities being available to receive and utilize Customer's condensate. The condensate shall be returned to the location on the Utility's premises specified by the Utility.

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19.2 Any condensate returned must be of a quality acceptable to the Utility, as specified in the special contract, but in no case having a temperature of less than 140° F and a conductance of more than 25 micromhos. No contaminants such as volatile additives or amines may be present in the condensate returned.

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- 19.3 In the event the Utility's equipment, in which the returned condensate is utilized, is retired from service no further condensate may be returned by the Customer.
- 19.4 Return of condensate is subject to a special contract which includes details providing the conditions under which the condensate may be returned.
- 19.5 Credit for condensate shall be <u>specified in the Customer's contract and will not exceed</u> five percent (5%) of the unit mass steam cost during each billing cycle for all condensate returned during such billing cycle which meets the quality standards specified in the special contacts.
- 19.6 The availability of this return condensate provision is restricted to Customers who can return condensate to the Utility hereunder at not less than an average of 30 gallons per minute (GPM).

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CERTIFICATE OF SERVICE

I hereby certify that copies of Volumes I and II of the "Direct Testimony and Exhibits of Carey B. Lykins, William A. Tracy, James O. Dillard, John R. Brehm, Michael D. Strohl, LaTona S. Prentice, Donald J. Clayton and Craig A. Jones" have been served by hand-delivery or United States mail, First Class postage prepaid this 2nd day of April, 2007 on the following:

Randall C. Helmen Indiana Office of Utility Consumer Counselor Indiana Government Center, North 100 N. Senate Avenue, Room N501 Indianapolis, Indiana 46204-2208 John F. Wickes, Jr.
Todd Richardson
Jennifer Wheeler Terry
Lewis & Kappes, P.C.
2500 One American Square
Box 82053
Indianapolis, Indiana 46204-2208

An Attorney for Citizens Thermal Energy

Michael B. Cracraft (#3416-49) Steven W. Krohne (#20969-49) Hackman Hulett & Cracraft, LLP 111 Monument Circle, Suite 3500 Indianapolis, IN 46204-2030 (317) 636-5401 Michael E. Allen, Esq. (#20768-49) Citizens Thermal Energy 2020 North Meridian Street Indianapolis, IN 46202 (317) 927-4318

Attorneys for Petitioner Citizens Thermal Energy